<110> McCabe et al.

<120> ZONE 3 NECROSIS ASSOCIATED MARKERS AND METHOD OF USE THEREOF

<130> 21402-612

<140> 10/663,418
<141> 2003-09-15

<150> 60/410,763
<151> 2002-09-13

<160> 171

<170> CuraSeqList version 0.1

<210> 1
<211> 2018
<212> DNA
<213> Rattus norvegicus

<400> 1
```
ttttttttt ttttttttt gaaggttttc aaccggcatg tttttattaa tgaaatggaa  60
tggaagcagt cagaacagag attacagaat tacagaatgg atcagttatc tgttaagttt 120
tacagggctg gtgtgtgttg tttctgccta agggtcctgc tcaaaagatc ttggaatcca 180
cttgggaagc atcttagata tagatggttg ctgtgtcact tatgatacgg tccctgaatg 240
gttctatgtc actcgtggag gtggtgtcct atccccctat ctgaaatgag attgacgtcg 300
ggtgactttc tcttcgctgc agtgactcct gtgcgcctgt aatgcgacag gcacgtagga 360
aatgtgttca ggatttactg tggacttctc ctttcttcct tctaggtaaa attctaaagc 420
gtagttttgt aactgtgaaa tgctatctgt gactccattt tgtctaacta gcaccaatca 480
caggtgtaag ccggcatcaa cacaaacgct ggtttagaga tgccttctcc ttccgggtgc 540
acactgtggc ccggacctgg aggaattcgc cccgaaccgc tggcctgtgg ctactgtgcg 600
gatttgaatt tttgtttttc gaagagcgct ctcagctgct gctcagtggt ggcttccttc 660
tgctgcatca gctctgctgc ccctttcgtc actccccaag catccggctt ggacatcgaa 720
ggattgtacg gtctgccgga agctattcga agattctgcc agtattcttt cctggccctt 780
gccctgatcc agggtttggt gtgcatgtcc aaaccacttc cccagctgcc atgtttttct 840
gaagctggtg gtaaaaatcc cctttctggg gcgagctcct ctgcaatggc cctgatgtgg 900
tagggctcaa atccgcagca gccgccaatg tacctgaccc ccaggttgta ggcctctctg 960
gcgtattttt gaatatccca tctggtggca actctgggtt ccaatccaaa ggggaattct 1020
gggagatcaa taaatccctg tttgccacag tcaggggtgt ggtaggccag gggctggctc 1080
atcaagtaag ccttcagccg agctgcttcc agaccctcct tcatgagctt tattgtctgc 1140
aagctggtgc tggggtcgaa gtggcagttc acaccgacaa tggcggcacc tgcttttacc 1200
aaacgcactg cgcactctcc aggagacacg ccatgtagat ctccttcagg tccgatgcac 1260
atggtagccg ctataggctt cccggatgtt tttaaggcct cgactgccca cacggcttct 1320
tcaacatgtt caaaatactc tgcaatgagg aagtccacat tcttcttcat gaagacctca 1380
agctgttggt gaaatatctt tttaacttcc gtctcactct tgcagctgag gtaggaaggt 1440
gtctgactca cacctcctgc aaccaatgca tccccttcgt cagcaacttg ccgtgcaatg 1500
tcacaagcag cttcattgac cttctgccca gatatcttct ctgccacgta gttccctcgg 1560
ttttccagct tgtcctcact tgcatagaaa gtgaaggtct gcatgacgtt cgatccagct 1620
ctgaggaact cccgatgaag ctgccgaact gcctcggggt gctccaccgc agcctctggg 1680
gtccagggtc cagcctttac gtagcccctc ttttccagtg caaagacaaa tcccccatct 1740
ccgatcacga cttcgccagc atttaagcgt tctaagattc ccctcttggc cttcttgccg 1800
gcaatcggtg ccatctttcc ggtgtcctga gtggcgctga acgcagctgc ggactggaca 1860
ggagcggtct ccagcaaagg cttgactgct gagccgcttc tggcctcttt atatacagca 1920
gctaggattc cccagccttg accgggtcca acacatggcc tcaggcgggg aacacgccca 1980
ccagcctttg aaacaggcct ggggctagct gggaattc                          2018
```

<210> 2
<211> 1984
<212> DNA
<213> Rattus norvegicus

<400> 2
gacatggcac cagccggagg cccacgagtc aagaagggta tcttggagcg tctggacagc 60
ggggaggttg tggttgggga cggcggcttt ctcttcactc tggaaaagag aggctttgtg 120
aaggcaggac tttggactcc agaagcagtg gtagagtatc caagtgcagt tcgtcagctt 180
cacacagaat tcttgagagc gggagccgat gtcttgcaga cattcacctt ttcggctgct 240
gaagacagaa tggaaagcaa gtgggaagct gtgaatgcag ctgcctgtga cctggcccag 300
gaggtggctg atggaggggc tgctttggtg gcaggggga tctgccagac atcactgtac 360
aagtaccaca aggatgaaac tagaattaaa aacattttcc gactacagct aggtgttttt 420
gccaggaaaa atgtggactt cttgattgca gagtattttg agcatgtgga agaagccgtg 480
tgggctgtgg aagtcttgag agaggtgggg gcacctgtgg ctgtgaccat gtgcatcggc 540
ccagaggggg acatgcacgg cgtgacaccg ggagagtgtg cggtgagact gtctcgtgca 600
ggggcgaaca tcattggggt aaactgccgg tttgggcctg gaccagctta caggaccatg 660
agctcatgaa ggagggcctc agggattgcg gcctactagc tcaccttatg gtccagtgct 720
tgggttttct cacactggga ctgtggcaag ggagggttgt ggacttcctg atatcctttt 780
cgcctggggc aagagttgcc accagatggg atattcaaaa atacgccaga gaggcctaca 840
acctgggggt caggtacatt ggcggctgct gcggatttga gccctaccac atcaggggcc 900
attgcagagg agctcgcccc agaaagggga tttttgccac cagcttcaga aaaacatggc 960
atctggggaa gtggtttgga catgcacacc aaaccctgga tcagagcaag ggctagacgg 1020
gaatactggg aaactctgtt gccagcttcg ggaagacctt tctgtccttc cctatcaaag 1080
ccagatgctt gagaagccat gaaagagacc tctgaagtga cagaaaggag gaaacagcct 1140
caagccccat ctggaatctt cctggctgct gtcctcagcc cgttcttctg gctgttgagc 1200
atcgatgagc tgtcgtccct tccaattgag tgacatatca ctcctgagta tgcccactag 1260
atgcggtgga gatgcagagg catccggacc ccacgcccca ccccctcccc tcacacactt 1320
actctctgcc tagtaatgcc acagagcttc catccccatc caaaggtcat caggcatggc 1380
tatcagttgg ctctcagggt ggatttgaca ttctcagatg attagaagtt ggcaagaagc 1440
aaccttggtg aataactctg gtgtctaaac tctgtacttg agttacagtc tcagtagagg 1500
agacgccaaa gctgttgcga gtgacggcag aattattgaa cagtcatgat gcttggcttt 1560
caaaggcgat tatcgcttta aggtcttaga attagtaagt gcatctttat aaccaggcat 1620
agctagatca taaactactg atggccaagg accatagaac gtgcttctta ccttcctctc 1680
tagttagcat tacgacaaac ataatcacca acgctcaggg aaacacttgc tgattcaagt 1740
aaaatgcatg aaccttggaa gacctttcta gaagtcagag atcaagttca tcttgttcta 1800
gcactttcca cattcatgtt tggtttgtat gctgcgccct acttttgttt tttgctacaa 1860
tgtaacaaat tagtgagtaa ccattagtga aattgcgaat aattttcctt ttctaaattt 1920
tgatttcttt ggaacattga tttaaaaaaa atagtgtgtt gcttgtcaaa aaaaaaaaaa 1980
aaaa 1984

<210> 3
<211> 2510
<212> DNA
<213> Rattus norvegicus

<400> 3
ccatagcgaa gacttcatga agactgtccc aggcatgctg tgacacaaac tacagaaggt 60
gggaaaagat ctttgtggtc aaaccatccg gaccttggct accgcagaca gaacaatact 120
gaccgcattc actcatacac agttctcggc acctcccagt gctcagagca gaccctcaag 180
gagatgagca gatccaggat ggggagccca atgcaccgag tgtccctggg ggacacctgg 240
agctggcaag tgcacccgga catagacagc gaaaggcact caccgtcctt cagtgtggag 300
cgactcacca acatccttga tggaggcctc ccaaacaccg tgctgcgaag aaaagtcgaa 360
agcatcatac aaagtgaccc agtgtttaat ttgaagaagc tttacttcat gacccgagag 420
gagctatatg aggatgcgat tcaaaagaga ttccatctcg agaagctagc ctggagcctg 480
ggctggtcag aagatggtcc tgaacgcatt tatgctaaca gagtccttga tggaaacgtc 540
aacttaagct tacatggtgt tgccatgaat gctatccgaa gcctgggctc agatgaacag 600
attgctaaat ggggccaact ctgcaaaaac ttccaaatca tcacaacata cgcccagaca 660
gagctgggac acgggacata cctacagggc ctggagactg aagccaccta tgatgaagcc 720
aggcaggagc ttgtgataca cagccctacg atgacttcca ccaagtggtg gcctggggac 780
ttgggatggt cggtcaccca tgctgtggtc ctagcccagt tgacctgctt aggagtccgg 840
cacggcatgc acgccttcat tgtgcccatt cggagcctag aggatcacac cccactgcca 900
ggaatcacag ttggggacat aggccccaag atgggtttgg aacacataga caatggcttc 960
ctgcaactga accacgtgcg ggttcccaga gaaaacatgc tcagtcgctt tgcagaggtc 1020
ttgccagatg gtacctacca gaggcttggg acgccacaga gcaattatct tggcatgttg 1080
gtgacccggg tgcagctgct gtgtaaagga atcctaccct ccctccagaa ggcttgcatc 1140
attgccacgc gctactcagt aatccgccat cagtctcgac ttcggcccag tgacccagag 1200
gcaaaaatcc tggaatacca gacgcagcag cagaaactcc ttcctcagct tgctgtgagc 1260

tatgccttcc acttcacggc caccagcctc tcagaattct tccacagctc ctacagtgct 1320
attctgaaga gagacttcag cctcctgcct gagctccatg cattgagcac tggtatgaag 1380
gccacgtttg cagacttctg tgcccagggc gccgagatct gtcgcagagc ttgcgggggc 1440
catggctact caaagctgag cggcctgccg acactggttg ctcgagcaac agcctcttgc 1500
acatatgagg gtgagaatac ggtgctctac ctgcaagtgg ccaggtttct gatgaagagc 1560
tatctgcagg ctcaagcgtc cccaggcgcc acaccacaga agcctctccc tcagtccgtc 1620
atgtatattg ccacacaaag gccagccagg tgctcagccc agactgcagc tgacttccgc 1680
tgcccagatg tctataccac agcctgggca tatgtgtcta ccaggctcat aagagatgca 1740
gcacaccgta cacagaccct catgaagtcc ggggttgacc agcatgatgc ctggaatcaa 1800
actactgtca tccaccttca ggctgctaag gctcactgct acttcatcac tgtgaagaat 1860
ttcaaggaag ctgtggagaa actagacaag gaaccagaga ttcagcgtgt gctccaacgc 1920
ctctgtgacc tctatgcctt acacggtgtt ctgactaact caggggactt tctgcatgat 1980
ggcttcctgt ctggggccca ggtggacatg gccagagaag ccttcctaga cctgcttccc 2040
ttgatccgga aggatgccat cttgttaacc gatgcttttg acttctcgga ccattgttta 2100
aactcggcac ttggctgtta tgatggacac gtctacgaac gcctgtttga gtgggctcag 2160
aagtacccag ccaatactca ggagaaccct gcctataaga agtatatccg accactgatg 2220
ctcggctgga gacacaagat gtgaaaagtc aaaggatttg ggaccgagaa gcaccacggc 2280
cttactatgg cacatataca tagagaattt aaagcacggg gggggggggg gggggggtgc 2340
tgctcggtta aatcaggtag taaattggta catgaatgga tggtcatcct attagtctac 2400
tattgagcat gtttgaaact ttcccttgtc catctatagc atgtatttgg ctaaatgcta 2460
aaatttttgt tttacataca ggaaaagcta ataaacttgt cagttacaaa 2510

<210> 4
<211> 4601
<212> DNA
<213> Rattus norvegicus

<400> 4
tttttttttt tttttttttt tttttttttt tttttttttt taacaatgag acatatacag 60
ctttatttaa cctgtaaaaa gtcacactct gcagagtgac acctttctta tctcagcaga 120
aagcaaggag tgtgtgaaaa acctttttct caggttggga accgtatgac cctggctggg 180
ctcacatgtg gatccttcca gagtccttgt gtgtggcagc ttcttcccag aggtctccct 240
ggctggtgtg acccctcacc aacaacagac agggggggcaa aatatttcta cctggacaag 300
gctgccctga gattgtccct ttccctccta ttaagggaca ttacatgctt aagaccttcc 360
cagaaaagtc accttcaagg tgacttggct ttcatcatgt ctgctgacac ttaggctcca 420
cttatttacc atgatggtgt gtgctaacgg tccttcctct tccaataacc tcaccatcga 480
tggcatttta aatatcactc tgttctctgg gaccgaggga tggagaaccg ctctccctca 540
gaccaggttt tgactcagga gctgggtttt attttgaaga aacttcccta catgagtcat 600
gagcaaggga aatggatgtg ggggagggag gaggggctct gagggaggag tacgaatgga 660
ggaaagaaaa gaatgtcatt ggcgagggag agcatggcac agcccagggc ttccctctct 720
tccctccacc tccttccttt cttcctgcag acggggaact ccagtccctc tcagatggga 780
actgagttca ccctggttcc caacgcatac ggtttcagct tcgcttctgt ttagcatcac 840
ctttctctgt ctttatcgtc aatcattacg cgtttggttt cccacggctt ctacacactt 900
ccatggccga gaaatggcgg ttgcccatgg gcagcaggtc cagttcattc ttcacaggtg 960
ggaagttgtt tctcagccaa gaagctgatc tttctggcac attccaccgt ggtcaacctc 1020
tgtttccccc ttgaccctgg tccttttcat tcctctcctc ccctaggaac atcgagttct 1080
catgccatta ccgacggtga ctggttcatc tggaccctca tcgagtggat gctgctaaga 1140
atcttcttct gatggcctgc caaggtgacc cctattctca ggaggtcttc tgatgtcatc 1200
tgggtgacca gctggaggga ggtgaagcca gcggtgagga agctgtccct gtactggacc 1260
attttgatgg cacttagcca gtcatccacg gtggtaaagg ccgtgaagtc tgggatagag 1320
cggtcaagca ggggttggga aggcacagcg gtgatggttg ccacagtctt gagactagct 1380
gggttccgga tcatcttgtc cagggtgttg acgatctctg caaaacgggg ccggctattt 1440
cgatccttct gccaacagtc cagcatgagc tggtgcaggg cagctgggca gtccatagga 1500
gggggcagcc ggtagtcctg ctcaatggca ttgatgacat cttgattgga catatcccag 1560
taaggtctct ctccaaatga cattacttcc cacatgacaa tcccgtagct ccagacatcg 1620
ctggctgacg taaacttgcg gtaggcgatg gcctctggag ctgtccatct aacaggtatc 1680
ttccctccca aggagctggt gtaggtgggg tctgaggtgt catcctggag gtagcgagag 1740
aggccaaagt cagacacttt gcacaccagg ttgctgttca ccagaatgtt cctagcagcc 1800
aggtcccggt gcacataatt catctcagat aggtacttca tgccagcagc gatgcccctc 1860
agcatcccca caagctggat cacggtgaac tgtccgtcat tttgccggag gaaagagtct 1920
aaagcgccat tctccatgaa ctccgtaatg atcatgacag gtcggctctt ggtgacaaca 1980
ccctctaggc gaatgatgtt gggatggtca aactggccca tgatgctcgc ctcgctcaga 2040
aaatcccgac gctgtttctc tgagtaccca gctttcaggg tcttgatggc cacatagatt 2100

tccctcttgc ctggcagctt caatcggccc ttgtacactt ctccaaactc ccctgctccg 2160
atgacctctt caattttcac aaaagacaca tcaatctcct tggcaaactc ccggacagct 2220
tcattagggt cctcataagt gaacgggtca atgtagatct tcatccctgg ggagcctcgg 2280
cctgtgctgt aatgctgaag tttatcactg tacacagcct ctttgctgta agctcgtttc 2340
ctgctgcaga caatggagat agccaccaga gacacaacaa atacaacccc agctgctgca 2400
gagccagcga tcaggggtag ctgctctctc agctccgact tgtaatcatc atctgtcaga 2460
gtctggaagc acatcttgcc actgaacttg ccatagccag ccacggttcg agctcgtacc 2520
tggaccacat acaccatgcc gggccgtagc ccatcgatac gtgccgtgtt ggtctggctc 2580
ctggccatgg aagagttgaa ctcattgtgc tccttctcat agtaccggat ctcatagtcc 2640
aggatgatgc cattaggctg ctccggctga ggccatgaca aggtgatgct cctcatggtg 2700
gcactgacct ggtgcatgat aggaacagtg gaggggcgag cttggtttgt ggtgatgttg 2760
acagagacat gctgtggggg gaagggactc ttgctagaga ctccattgat ggcctggata 2820
tcaaaagtgt atggggtgtg ggcccatagg ctactgatag agacacgaca ctcagtcaag 2880
cccagctgtc tgggtacaaa ctccacattg tcatcgcagc gggagcaact ccggcggtct 2940
gctctgcact tcttgcagat gatgttgtag gtcacatcat ctcgcccacc ggtctctctt 3000
ggagggtgcc actctagaat gatagatgtc tcattcacaa tggagatgac atttcgaggg 3060
cctgatggga cactagtgca cgccacttct gggggatcaa agtctgctcg gtaatagcca 3120
gtccggcagg tgcagatggg agacgcctct gaaggggagc ggctgttgga ggggcagtgg 3180
gagcagcctt cagcttcctg gctggccttg aaggttcccg caggacaggc cttgcaggcc 3240
acgctgttct caggttcata gccagcctta caggtgcagc gcccaatggg caccatccac 3300
tctccatctc cattgcagta gagttttatg ggcacatcca cttcttctgc attagggatg 3360
catgtgcccc gagcaatcac cagagatgtg ctctctgctc ctgtcatggt ttctgggaac 3420
actgcaaaat tttgcacaat gctgggacac tttttgaaga agacacggac agaaagtaga 3480
gacatacagg ctccataatc ctggaaagcg aggtaaaaac cattcctagt aagaggccca 3540
aagctcctga cttctgtgtt gaccttcatc aaccttcccc caaaatccac ctgggagaag 3600
ctctcatctg cagcaatggt gtcaactttg aggtaggggg cttcagacca gaaggctgac 3660
ttcttggtgg caatgacaga gtcagtctca tagtagtata agttgaaggt ctctttgcag 3720
gagcctggga catttggaag gctgctgcag tccctcacag tgaagcgcat ctctgtatag 3780
atgcgatggg cgccccgtct gttgataaag gtggtaagca gccagttgtt ctggttgggt 3840
tcaaagacgt tgcacacttg gtaagtacgg atggtgttca ggttttcatc gtagccactg 3900
acttcttccc acccagaggc agggttggcc gtccatccca actctgcagt ggcagtcctt 3960
gtgtccatca atgtttcttc catcgcggcc actgcagatg ccaggaggaa cagcagcagg 4020
caatccaggg ccatcgccgg ccagcggccc ccaggccgag ccccagcgga gacgcgccgc 4080
gtcccagggc gccgctgcgc tcccggcggg tggcttctcc gtgtcctttc gcgctctggc 4140
cgggaccgga ctccccggag cgcggcgtgg gcgtgggcgg gagtgtgcgc gcgtggggcg 4200
gtgcgggcgc gcgtggatgt gggtgtgcat gtgtgtgtgt gtgtttatgg gagaggtggg 4260
tgtgtgcgtg cgtgtgtgag agagggtgag ggagagcgag ccaaaccata aaaagatgga 4320
gggggagttg tgggtgggcg accctgctag tttcatagct ggcattcttg gggctggaaa 4380
ccccatggca caagacgtta ggatggctgg tctgctcaac cactgtgccg tgtgtgaggg 4440
gtctctcggc ttgtgtctct atcctgctct cattgagtcg gatgacctgt acagctctgt 4500
ctaccatgga ggatgtattg tgaagtctct gtgctaagga ctcacgtttg ggtgctttgg 4560
agatgaaatg gatgacatgt acactggata tccccctcgt g 4601

<210> 5
<211> 902
<212> DNA
<213> Rattus norvegicus

<400> 5
ccccccctcg aggtgttttc tttcatttca ttccttgtct ttagggcttt ttttttttc 60
aaggtctcat tatttatttg ttactcttta aagacttatt tttgactgga ctcagattta 120
gaagtagaag ctctcagcga agacagccta cgtctcttgg caatctgttc ctggcgcttc 180
tctttggctt ccttcattct cttggccaaa agtttagcat attctgcagc ctcctccttg 240
tttttcttag tgcgttgctt cttcagagca atacgtcggc gtttgtgttg caggacacgg 300
ggagtaacaa gacgctgaat cttgggcgct ttggtcctgg gcttcttacc ttctttgttt 360
aagggctttc tgacaacata ctggcggaca tcatcttctt tggagagatt aaaaagcttt 420
cggattctac tagctctttt aggtcccaac cgacgaggca cagtggtatc tgtcagtcct 480
ggaatatcct tctctccttt ttttacaata accaagttga gaacactcag gttggcatcc 540
acaatgcatc ctcggacaga cttgcgcttc ctctctccag ttctcctagg tctataacaa 600
gaatgcccct tactcaaaag caggcgcact ctgccatggg tcaaaacgcc ttgcttcatg 660
ggaaaacctt gtttgtcatt cccaccgctg atccggacca cataaccctt ccactcttca 720
ccaagagcat cagcagctac ttctgtggcc atgcgcttct catagaacgt acgaagcttg 780
cgttcgtcat ccacttctat gagtttctga cagccagtgg cagggaagga gatattcagc 840

ttcatcttga cacagccgac cgcctaggag gcgtgttacc attctgatgt tggagcggcc 900
gc 902

<210> 6
<211> 2560
<212> DNA
<213> Rattus norvegicus

<400> 6
agttgcttca gtgtcccggt gcggttagtc acgtttcgtg cgtgctcatt ctgccaagat 60
gcctgaggaa acccagaccc aagaccaacc aatggaggaa gaggaggtcg aaacctttgc 120
ctttcaggca gaaattgccc agttaatgtc cttgatcatc aacactttct actcgaacaa 180
agagatcttt ctgagggagc tcatttccaa ctcctcagac gctctggata agatcagata 240
cgagagcttg accgacccta gtaaactgga ctcggggaag gagctgcaca ttaatctcat 300
tcccaacaag caagaccgaa ccctcactat tgtggatact ggcattggaa tgaccaaggc 360
tgacttgatc aataaccttg gcactattgc caagtcaggc accaaagcct tcatggaggc 420
tttgcaggct ggtgcagata tctctatgat tggccagttt ggtgttggtt tttactctgc 480
gtatttggtt gctgagaaag tgactgtcat caccaagcat aatgatgacg agcagtacgc 540
ctgggagtcc tcagctggag gatccttcac tgtgaggaca gacacaggtg aaccaatggg 600
tcgtggaaca aaggttatct tgcatctaaa agaagaccaa actgagtatt tggaggaaag 660
gagaataaaa gaaattgtga agaaacattc tcagtttatt ggctacccca ttactctctt 720
tgtggagaag gaacgtgaca aggaagtcag tgatgatgag gctgaagaaa aggaagagaa 780
agaggaagag aaagaaaaag aagaaaagga gtctgatgac aagcctgaaa tagaagatgt 840
tggttctgat gaagaagaag aagagaagaa ggatggtgac aagaagaaaa agaagaagat 900
aaaggaaaag tacattgatc aagaagaact caacaaaaca aagccgatct ggaccagaaa 960
tcctgatgac attacgaatg aagaatacgg agagttctac aagagcttaa ccaacgactg 1020
ggaagaacat ttggcagtaa agcatttttc tgttgaagga caattagaat tccgggctct 1080
tctttttgtc ccaagacgcg ctccttttga tctatttgaa aacagaaaga aaaagaacaa 1140
catcaagttg tatgttcgca gagtttttat catggataac tgtgaggagt taatccccga 1200
gtatctgaat ttcatcagag gggtggtgga ttctgaggat ctccctctaa atatttcccg 1260
tgaaatgctg caacaaagca aaattctgaa agttatcagg aagaatttgg tcaagaaatg 1320
cctagaacta tttactgaac tggctgaaga taaagagaac tacaaaaagt tttatgagca 1380
gttctcaaaa aatataaagc ttggaattca tgaagactct caaaatcgga agaagctttc 1440
agagctgttg agatactaca catctgcttc tggggatgag atggtttctc tgaaggacta 1500
ctgcaccaga atgaaggaaa accagaagca catctatttt atcacaggtg agaccaagga 1560
ccaggttgct aactcagcct ttgtggaacg tctccgaaag catggcttag aagtaatcta 1620
tatgattgag cccattgatg agtattgtgt gcaacagctg aaggaatttg agggcaagac 1680
cttggtgtca gttaccaaag aaggactgga acttccagaa gatgaagagg aaaagaagaa 1740
acaggaagag aaaaagacaa aatttgagaa cctctgcaaa attatgaagg atattttaga 1800
gaaaaaggtt gaaaaggtgg ttgtgtcaaa ccgattggtg acatccccat gctgtattgt 1860
cacaagcaca tatggctgga cagcaaacat ggagagaatc atgaaagctc aagccctcag 1920
agacaactca acaatgggtt acatggcagc aaagaaacac ctggagataa accctgatca 1980
ctccattatt gaaaccttaa ggcaaaaggc agaggctgac aagaatgaca agtctgtgaa 2040
agatctggtc atcttgctgt acgaaacagc actcctgtct tccggcttca gtctggaaga 2100
tccccagacc catgctaaca ggatctacag gatgatcaag cttggtctag gtattgatga 2160
ggatgatcct actgtggatg ataccagtgc tgctgtaact gaagaaatgc cacccctgga 2220
aggagatgat gacacatcac gcatggaaga agtagactag gcttcaccag aactatgtgt 2280
ttgatgctta ccttcattcc ttctgataat atattttcca tgatttttgt ttatttttgt 2340
taacatttaa aacatctgtg tggcatgaaa actaggggaa ggtaaaaatt tctacatgtg 2400
atactgtgat actataggtt tgactcaaga ggttgataga acgtttgttg taagacgtaa 2460
tgtaacctac ggtacttgtt aactatgggg gtctgaaagt gtttagctgt tgagctggat 2520
tcctttagta gaccaaatta agatgactta agtttcatct 2560

<210> 7
<211> 1567
<212> DNA
<213> Rattus norvegicus

<400> 7
ttgctcctcc ttgctctcct cgtgggcttc ttgttactct tagtcagggg acacccaaag 60
tcccgtggca acttcccacc aggacctcgt ccccttcccc tcttggggaa cctcctgcag 120
ttggacagag ggggcctcct caattccttc atgcagcttc gagaaaaata tggagatgtg 180
ttcacagtac acctgggacc aaggcctgtg gtcatgctat gtgggacaga caccataaag 240

gaggctctgg tgggccaagc tgaggatttc tctggtcggg gaacaatcgc tgtgattgag 300
ccaatcttca aggaatatgg tgtgatcttt gccaatgggg aacgctggaa ggcccttcgg 360
cgattctctc tggctaccat gagagacttt gggatgggaa agaggagtgt ggaagaacgg 420
attcaggagg aagcccaatg tttggtggag gaactgcgga aatcccaggg agccccactg 480
gatcccacct tcctcttcca gtgcatcaca gccaacatca tctgctccat tgtgtttgga 540
gagcgctttg actacacaga ccgccagttc ctgcgcctgt tggagctgtt ctaccggacc 600
ttttccctcc taagttcatt ctccagccag gtgtttgagt tcttctctgg gttcctgaaa 660
tactttcctg gtgcccacag acaaatctcc aaaaacctcc aggaaatcct cgattacatt 720
ggccatattg tggagaagca cagggccacc ttagacccaa gcgctccacg agacttcatc 780
gacacttacc ttctgcgcat ggagaaggag aagtcgaacc accacacaga gttccatcat 840
gagaacctca tgatctccct gctctctctc ttctttgctg gcactgagac cagcagcacc 900
acactccgct atggtttcct gctgatgctc aagtaccccc atgtcgcaga gaaagtccaa 960
aaggagattg atcaggtgat cggctcacac cggctaccaa cccttgatga ccgcagtaaa 1020
atgccataca ctgatgcagt tatccacgag attcagaggt tttcagatct tgtccctatt 1080
ggagtaccac acagagtcac caaagacacc atgttccgag ggtacctgct tcccaagaac 1140
actgaagtgt accccatcct gagttcagct ctccatgacc cacagtactt tgaccaccca 1200
gacagcttca atcctgaaca cttcctggat gccaatgggg cactgaaaaa gagtgaagct 1260
ttcatgccct tctccacagg aaagcgcatt tgtcttggcg aaggcattgc ccgaaatgaa 1320
ttgttcctct tcttcaccac catcctccag aacttctctg tgtcaagcca tttggctccc 1380
aaggacattg acctcacgcc caaggagagt ggcattggaa aaatacctcc aacgtaccag 1440
atctgcttct cagctcggtg atccggctga ggcagccagg tgccccagtt ctgttgggaa 1500
tggcctcatg tttctgcctc tgggggacct gctgaaaacc aggctccaag gccactgctc 1560
cacatct 1567

<210> 8
<211> 1686
<212> DNA
<213> Rattus norvegicus

<400> 8
cccagtgccc ttttgtcctg tgtatctgtt tcgtggtgtc cttgccaaca tctatggtgt 60
gggtaaggga atgaggagtg aatagccaaa gcaggaggcg tgaacatctg aagttgcata 120
actgagtgta ggggcagatt cagcataaaa gatcctgctg gagagcatgc actgaagtct 180
accgtggtta caccaggacc atggagccca gtatcttgct cctccttgct ctccttgtgg 240
gcttcttgtt actcttagtc aggggacacc caaagtcccg tggcaacttc ccaccaggac 300
ctcgtccccc tccccctcttg gggaacctcc tgcagttgga cagaggaggc ctcctcaatt 360
ccttcatgca gcttcgcgaa aaatatggag atgtgttcac agtacacctg ggaccaaggc 420
ctgtggtcat gctatgtggg acagacacca taaaggaggc tctggtgggc caagctgagg 480
atttctctgg tcggggaaca atcgctgtga ttgagccaat cttcaaggaa tatggtgtga 540
tctttgccaa tggggaacgc tggaaggccc ttcggcgatt ctctctggct accatgagag 600
actttgggat gggaaagagg agtgtggaag aacggattca ggaggaagcc caatgtttgg 660
tggaggaact gcggaaatcc cagggagccc cactggatcc caccttcctc ttccagtgca 720
tcacagccaa catcatctgc tccattgtgt ttggagagcg ctttgactac acagaccgcc 780
agttcctgcg cctgttggag ctgttctacc ggacctttc cctcctaagt tcattctcca 840
gccaggtgtt tgagttcttc tctgggttcc tgaaatactt tcctggtgcc cacagacaaa 900
tctccaaaaa cctccaggaa atcctcgatt acattggcca tattgtggag aagcacaggg 960
ccaccttaga ccccagcgct ccacgagact tcatcgacac ttaccttctg cgcatggaga 1020
aggagaagtc gaaccaccac acagagttcc atcatgagaa cctcatgatc tccctgctct 1080
ctctcttctt tgctggcact gagaccggca gcaccacact ccgctatggt ttcctgctca 1140
tgctcaagta cccccatgtc acagtgaaag tccaaaagga gattgatcag gtgattggct 1200
ctcacaggcc accatccctt gatgatcgta ccaaaatgcc atacactgat gcagtcatcc 1260
acgagattca gaggtttgca gatcttgccc caattggttt accacacaga gtcaccaaag 1320
acaccatgtt ccgagggtac ctgctcccca agaacactga ggtgtatccc atcctgagtt 1380
cagctctcca tgacccacag tactttgacc atccagacac cttcaatcct gagcacttcc 1440
tggatgccga tgggacactg aaaaagagtg aagcttttat gcccttctcc acaggaaagc 1500
gcatttgtct tggcgaaggc attgcccgaa atgaattgtt cctcttcttc accaccatcc 1560
tccagaactt ctctgtgtca agccatttgg ctcccaagga cattgacctc acgcccatgg 1620
agagtggcat tgcaaaaata cctccaacgt accagatctg cttctcagct cggtgatcgg 1680
gctgag 1686

<210> 9
<211> 1476
<212> DNA

<213> Rattus norvegicus

<400> 9
atggagccca gtatcttgct cctccttgct ctccttgtgg gcttcttgtt actcttagtc 60
aggggacacc caaagtcccg tggcaacttc ccaccaggac ctcgtcccct tcccctcttg 120
gggaacctcc tgcagttgga cagaggaggc ctcctcaatt ccttcatgca gcttcgcgaa 180
aaatatggag atgtgttcac agtacacctg ggaccaaggc ctgtggtcat gctatgtggg 240
acagacacca taaaggaggc tctggtgggc caagctgagg atttctctgg tcggggaaca 300
atcgctgtga ttgagccaat cttcaaggaa tatggtgtga tctttgccaa tggggaacgc 360
tggaaggccc ttcggcgatt ctctctggct accatgagag actttgggat gggaaagagg 420
agtgtggaag aacggattca ggaggaagcc caatgtttgg tggaggaact gcggaaatcc 480
cagggagccc cactggatcc caccttcctc ttccagtgca tcacagccaa catcatctgc 540
tccattgtgt ttggagagcg ctttgactac acagaccgcc agttcctgcg cctgttggag 600
ctgttctacc ggacctttc cctcctaagt tcattctcca gccaggtgtt tgagttcttc 660
tctgggttcc tgaaatactt tcctggtgcc cacagacaaa tctccaaaaa cctccaggaa 720
atcctcgatt acattggcca tattgtggag aagcacaggg ccaccttaga ccccagcgct 780
ccacgagact tcatcgacac ttaccttctg cgcatggaga aggagaagtc gaaccaccac 840
acagagttcc atcatgagaa cctcatgatc tccctgctct ctctcttctt tgctggcact 900
gagaccggca gcaccacact ccgctatggt ttcctgctca tgctcaagta cccccatgtc 960
acagtgaaag tccaaaagga gattgatcag gtgattggct ctcacaggcc accatccctt 1020
gatgatcgta ccaaaatgcc atacactgat gcagtcatcc acgagattca gaggtttgca 1080
gatcttgccc caattggttt accacacaga gtcaccaaag acaccatgtt ccgagggtac 1140
ctgctcccca agaacactga ggtgtatccc atcctgagtt cagctctcca tgacccacag 1200
tactttgacc atccagacac cttcaatcct gagcacttcc tggatgccga tgggacactg 1260
aaaaagagtg aagcttttat gcccttctcc acaggaaagc gcatttgtct tggcgaaggc 1320
attgcccgaa atgaattgtt cctcttcttc accaccatcc tccagaactt ctctgtgtca 1380
agccatttgg ctcccaagga cattgacctc acgcccatgg agagtggcat tgcaaaaata 1440
cctccaacgt accagatctg cttctcagct cggtga 1476

<210> 10
<211> 1476
<212> DNA
<213> Rattus norvegicus

<400> 10
atggagccca gtatcttgct cctccttgct ctccttgtgg gcttcttgtt actcttagtc 60
aggggacacc caaagtcccg tggcaacttc ccaccaggac ctcgtcccct tcccctcttg 120
gggaacctcc tgcagttgga cagagggggc ctcctcaatt ccttcatgca gcttcgagaa 180
aaatatggag atgtgttcac agtacacctg ggaccaaggc ctgtggtcat gctatgtggg 240
acagacacca taaaggaggc tctggtgggc caacctgagg atttctctgg tcggggaaca 300
atcgctgtga ttgagccaat cttcaaggaa tatggtgtga tctttgccaa tggggaacgc 360
tggaaggccc ttcggcgatt ctctctggct accatgagag actttgggat gggaaagagg 420
agtgtggaag aacggattca ggaggaagcc caatgtttgg tggaggaact gcggaaatcc 480
cagggagccc cactggatcc caccttcctc ttccagtgca tcacagccaa catcatctgc 540
tccattgtgt ttggagagcg ctttgactac acagaccgcc agttcctgcg cctgttggag 600
ctgttctacc ggaggttttc cctcctaagt tcattctcca gccaggtgtt tgagttcttc 660
tctgggttcc tgaaatactt tcctggtgcc cacagacaaa tctccaaaaa cctccaggaa 720
atcctcgatt acattggcca tattgtggag aagcacaggg ccaccttaga cccaagcgct 780
ccacgagact tcatcgacac ttaccttctg cgcatggaga aggagaagtc gaaccaccac 840
acagagttcc atcatgagaa cctcatgatc tccctgctct ctctcttctt tgctggcact 900
gagaccagca gcaccacact ccgctatggt ttcctgctga tgctcaagta cccccatgtc 960
gcagagaaag tccaaaagga ggttgatcag gtgatcggtt cacaccggct accaaccctt 1020
gatgaccgca gtaaaatgcc atacactgat gcagttatcc atgagattca taggttttca 1080
gatcttgtcc ctattggagt accacacaga gtcaccaaag acaccatgtt ccgagggtac 1140
ctgcttccca agaacactga agtgtacccc atccggagtt cagctctcca tgacccacag 1200
tactttgacc acccagacag cttcaatcct gaacacttcc tggacgttaa cggggcactg 1260
aaaaagagtg aagctttcat gcccttctcc acaggaaagc acatttgtct tggcgaaggc 1320
attgcccgaa atgaattgtt cctcttcttc accaccatcc tccagaactt ctctgtgtca 1380
agccatttgg ctcccaagga cattgacctc acgcccaagg agagtggcat tggaaaaata 1440
cctccaacgt accagatctg cttctcagct cggtga 1476

<210> 11
<211> 1760

<212> DNA
<213> Rattus norvegicus

<400> 11
cccagtgccc ttttgtcctg tgtatctgtt tcgtggtgtc cttgccaaca tgtatggtgt 60
gggtaaggga atgaggagtg aatagctaaa gcaggaggcg tgaacatctg aagttgcata 120
actgagtgga ggggcggatt cagcataaaa gatcctgctg gagagcatgc actgaagtct 180
accgtggtta caccaggacc atggagccca gtatcttgct cctccttgct ctccttgtgg 240
gcttcttgtt actcttagtc aggggacacc caaagtcccg tggcaacttc ccaccaggac 300
ctcgtcccct tcccctcttg gggaacctcc tgcagttgga cagagggggc ctcctcaatt 360
ccttcatgca gcttcgagaa aaatatggag atgtgttcac agtacacctg ggaccaaggc 420
ctgtggtcat gctatgtggg acagacacca taaaggaggc tctggtgggc caacctgagg 480
atttctctgg tcggggaaca atcgctgtga ttgagccaat cttcaaggaa tatggtgtga 540
tctttgccaa tggggaacgc tggaaggccc ttcggcgatt ctctctggct accatgagag 600
actttgggat gggaaagagg agtgtggaag aacggattca ggaggaagcc caatgtttgg 660
tggaggaact gcggaaatcc cagggagccc cactggatcc caccttcctc ttccagtgca 720
tcacagccaa catcatctgc tccattgtgt ttggagagcg ctttgactac acagaccgcc 780
agttcctgcg cctgttggag ctgttctacc ggaggttttc cctcctaagt tcattctcca 840
gccaggtgtt tgagttcttc tctgggttcc tgaaatactt tcctggtgcc cacagacaaa 900
tctccaaaaa cctccaggaa atcctcgatt acattggcca tattgtggag aagcacaggg 960
ccaccttaga cccaagcgct ccacgagact tcatcgacac ttaccttctg cgcatggaga 1020
aggagaagtc gaaccaccac acagagttcc atcatgagaa cctcatgatc tccctgctct 1080
ctctcttctt tgctggcact gagaccagca gcaccacact ccgctatggt ttcctgctga 1140
tgctcaagta cccccatgtc gcagagaaag tccaaaagga ggttgatcag gtgatcggtt 1200
cacaccggct accaaccctt gatgaccgca gtaaaatgcc atacactgat gcagttatcc 1260
atgagattca taggttttca gatcttgtcc ctattggagt accacacaga gtcaccaaag 1320
acaccatgtt ccgagggtac ctgcttccca agaacactga agtgtacccc atccggagtt 1380
cagctctcca tgacccacag tactttgacc acccagacag cttcaatcct gaacacttcc 1440
tggacgttaa cggggcactg aaaaagagtg aagctttcat gcccttctcc acaggaaagc 1500
acatttgtct tggcgaaggc attgcccgaa atgaattgtt cctcttcttc accaccatcc 1560
tccagaactt ctctgtgtca agccatttgg ctcccaagga cattgacctc acgcccaagg 1620
agagtggcat tggaaaaata cctccaacgt accagatctg cttctcagct cggtgatccg 1680
gctgaggcag ccatgtgccc cagttctgtt gggaatggcc tcatgtttct gcctctgggg 1740
gacctgctga aaaccaggct 1760

<210> 12
<211> 1733
<212> DNA
<213> Rattus norvegicus

<400> 12
gacttgggag gaaccagggc ctacacttag ccctggtaaa cagcagagca tgctgggata 60
attcttccca gaaaaggaaa agcaggcact tctgttccca gggaaaacaa caggagcact 120
ttggacctcc ctgctgcagt caggagtcat gtggctggaa cttgtcctgg cttcccttct 180
gggctttgtc atctactggt ttgtctcccg ggacaaggag gaaaccttac cactaggaga 240
tggatggtgg gggccagggt caaagccatc agccaaagaa gatgagagca tccggccctt 300
caaggtggaa acatcagatg aggagatcaa ggacttacac cagaggatag ataggttccg 360
ggcatcccca cctttggagg gcagccgctt ccactatggc ttcaactcca actacatgaa 420
gaaagtggtg tcctactgga ggaacgagtt tgactggagg aagcaggtgg agatcctcaa 480
ccagtaccct cacttcaaga ccaagatcga agggcttgac atccacttca tccatgtgaa 540
gcctccccag ctgccctcag ggcgcacccc aaagcccttg ctgatggtgc atggctggcc 600
tggatccttc tatgagtttt acaagatcat cccactactg actgacccca agtcccacgg 660
tctgagtgac gagcacgtgt ttgaagtcat ctgtccctcg attcctggct atggctactc 720
agaggcatcc agcaagaaag gtttaaattc ggtggccact gcgaggattt tctacaagct 780
gatgacacgg ctgggcttcc agaaattcta cattcaaggc ggggactggg ggtccctcat 840
ctgcaccaac atggcccaga tggttcccaa ccacgtgaaa ggcctgcact taaatatggc 900
tttcatttcg agaagttttt acaccatgac tcctctcctg ggccaacgct tcgggagatt 960
ccttggctac acagagaagg atatcgagct cttgtacccc tataaggaga aggttttcta 1020
cagcatcatg agggagagtg gctacttaca catccaagcc accaagccag acactgtggg 1080
ctgtgctctc aatgactctc ccgtgggcct ggctgcctac atcttagaga agttctccac 1140
ctggaccaag tcagagtacc gtgaactgga ggatggaggc ctggagagga agttctccct 1200
ggatgatctg ctggttaaca tcatgatcta ctggacgaca ggaaccattg tctcctccca 1260
acgctactac aaggagaatt tgggccaggg catcatggtc cataaacatg aggggatgaa 1320

ggtctttgtg cccactggct tttcagcctt cccttccgag ctactgcatg ccccagaaaa 1380
gtgggtgaag gtcaagtacc ccaaactcat ctcctattcc tacatggaac gtgggggcca 1440
ctttgctgcc tttgaagagc ccaagcttct ggcccaggac atccgcaagt tcgtgtccct 1500
ggctgagctg cagtagtgac actggatacc aactgtggct ttagcagcag ccctggttcc 1560
tcccaagtca cacttatgga agatgacccc tttctgagga ataagtttgt tccctgacca 1620
cactcgagga cccagactta aactccacag agtcgtatgt tacccccata tgcttcacct 1680
cactacatag ctgtgttagc tacatggctt taatgataaa tggatttatt tct 1733

<210> 13
<211> 1574
<212> DNA
<213> Rattus norvegicus

<400> 13
tgagccaatc ttcaaggaat atggtgtgtt ctttgccaat ggggaacgct ggaaggccct 60
tcggcgattc tctctggcta ccatgagaga ctttgggatg ggaaagagga gtgtggaaga 120
acggattcag gaggaagccc aatgtttggt ggaggaactg cggaaatccc agggagcccc 180
actggatccc accttcctct tccagtgcat cacagccaac atcatctgct ccattgtgtt 240
tggagagcgc tttgactaca cagaccgcca gttcctgcgc ctgttggagc tgttctaccg 300
gacctttcc ctcctaagtt cattctccag ccaggtgttt gagttcttct ctgggttcct 360
gaaatacttt cctggtgccc acagacaaat ctccaaaaac ctccaggaaa tcctcgatta 420
cattggccat attgtggaga agcacagggc caccttagac cccagcgctc cacgagactt 480
catcgacact taccttctgc gcatggagaa agtgagtcct gcatggatga gagaggagaa 540
gtcgaaccac cacacagagt tccatcatga gaacctcatg atctccctgc tctctctctt 600
ctttgctggc actgagaccg gcagcaccac actccgctat ggtttcctgc tcatgctcaa 660
gtacccccat gtcacagaga aagtccaaaa ggagattgat caggtgattg gctctcacag 720
gccaccatcc cttgatgatc gtaccaaaat gccatacact gatgcagtca tccacgagat 780
tcagagattt gcagatcttg ccccaattgg tttaccacac agagtcacca aagacaccat 840
gttccgaggg tacctgctcc ccaagaacac tgaggtgtat cccatcctga gttcagctct 900
ccatgaccca cagtactttg accatccaga caccttcaat cctgagcact tcctggatgc 960
cgatgggaca ctgaaaaaga gtgaagcttt tatgcccttc tccacaggaa agcgcatttg 1020
tcttggcgaa ggcattgccc gaaatgaatt gttcctcttc ttcaccacca tcctccagaa 1080
cttctctgtg tcaagccatt tggctcccaa ggacattgac ctcacgccca aggagagtgg 1140
cattgcaaaa atacctccaa cataccagat ctgcttctca gctcggtgat cgggctgagg 1200
cagccaggtg ccccagttct gttgggaatg gcctcatgtt tctgcctctg ggggacctgc 1260
tgaaaaccag gctcaaggcc actgctcaca tcttcctatt gcagttctcc aaagtcccaa 1320
ggcttgttct tattcctgtg aatggcactg aagaagtcaa tcgactgtct tattttgaca 1380
tgtgaacaga gatttcatga gtacacatct catgctgagt cacttccctc ttcctcctaa 1440
tagcccacgt ccccacttat cagccctcca tggtctgtga tctgtgctaa tggactctgt 1500
atatggtctc agtgctatgt ctacagactt acatagtatg tatggttcag gtaaacagaa 1560
tcacagagtg tgtg 1574

<210> 14
<211> 1473
<212> DNA
<213> Rattus norvegicus

<400> 14
atggaaccta gtgtcctact tctccttgct gtcctcctca gcttcttgct actcctggtc 60
aggggccatg caaagatcca tggtcgtctt ccaccaggac cctgccctgt acccctttg 120
ggaaatctct tgcagatgga cagaagaggc ctcctcaagt cttttattca gcttcaagaa 180
aaatatggag atgtgttcac agtgcactta ggactgaggc cagtggtcgt gttatgtggg 240
acacagacca taagagaggc tctggtggac catgctgagg ctttctctgg ccgggggaca 300
attgctgggc ttgagccagt tttccaggac tatggtatat tcttttccag tggagaacag 360
tggaagaccc ttcgacgatt ctctatggcc accatgagag actttgggat gagaaagaag 420
agtgtggagg agagaataaa ggaagaatcc caatgtttgg tggaggaact gaagaaatac 480
cagggagccc ccctggatcc caccttcctt ttccagtgca tcacatccaa catcatctgc 540
tccattgtct ttggagagtg ctttgactac acagatcacc aattcctgca cctgctggat 600
ctgatgtatc agacgttttc actcttaagc tcaatcttca gtcaggtatt tgaactcttc 660
cctggtgtcc tgaagtactt tcctggtgcc cacagacaaa tctccagaaa cctccatgaa 720
atcctggact tcattggcca gagtgtggag aagcacaggg ccactttgga cccaaatgct 780
ccacgagact ttatatatac ttaccttctg cacatggaga aaaagtcaaa ccattataca 840
gagttccatc actggaacct actgtcgtct gtactctctc tcttctttgc tggcactgag 900

actagcagca ccacactccg ctatggcttc ctgatcatgc tcaagtaccc tcatatcaca 960
gagaaagtcc aaaaagagat tgattgtgtg attggctcac accggctacc taccctggat 1020
gaccgcagca aaatgccata caccgaggca gttatccatg agattcagag attttcagat 1080
cttgccccta ttggaacacc acacagagtc atcaaagaca ccattttccg agggtacctg 1140
ctccctaaga acactgaggt gttccccatc ctgagttcag ttctccatga tccacagtac 1200
tttgaacaac cagacatctt caatcttcag cactttctgg atgccaatgg ggcactgaag 1260
ataattgaag cttttctgcc cttctccaca ggaaagcgaa tttgtcttgg tgaaagcatt 1320
gcccgcaatg aattgttcct tttcttcact accatcctcc agaacttctc cgtgtccagc 1380
cctgtggctc ctaaagacat tgatctcact cccaaagaga gtggtattgg aagaataccc 1440
caagtgtacc agatctgctt cttggcccac tga 1473

<210> 15
<211> 1269
<212> DNA
<213> Rattus norvegicus

<400> 15
gaattccgcg gccgccaacg tcctctctta cccgccacct tcttctgcca cctctaccac 60
ggtcaccatg tcgcaagccc ggcctgccac tgtgctgggt gccatggaga tgggtcgccg 120
catggatgtg acctccagct ccgcgtcggt gcgcgccttc ctgcagcgcg gccacacgga 180
gatagacacc gccttcgtgt atgcgaacgg tcagtctgag accatcctag gagacctggg 240
gctcggactg ggccgcagcg gctgcaaagt aaaaattgcc accaaggctg ccccaatgtt 300
tgggaagaca ctgaagccag ccgatgttcg gttccagctg gagacgtcac tgaagaggct 360
gcagtgtccc cgggtggacc tcttctattt acactttcca gaccacggca ctcctataga 420
ggagaccctg caggcctgcc accacgtgca tcaggagggc aagtttgtgg agcttggtct 480
gtccaactat gtctcctggg aagtggctga gatttgtacc ctctgcaaga aaaatggctg 540
gatcatgcca actgtgtacc agggcatgta caacgccatc accaggcagg tggagactga 600
gctcttcccc tgcctcagac acttcggact aaggttctac gccttcaacc ctttggctgg 660
gggcctgctg actggcagat ataaatacca ggataaggat gggaagaatc ctgagagccg 720
cttctttggg aatccatttt ctcaactgta catggaccgc tactggaagg aggaacactt 780
caatggcatc gccttggtgg agaaggctct gaagactacc tatggcccca ctgcccccag 840
tatgatctca gctgccgtac ggtggatgta ccatcactca cagctcaagg gcacccaagg 900
ggatgcagtc attctgggca tgtccagtct ggaacaactg gagcagaact tggccttggt 960
cgaggaaggg cctctggagc cagctgttgt ggatgccttt gaccaagcct ggaacctagt 1020
tgcccacgag tgtcccaact atttccgcta agatacatct gccttgggga tggcgcagct 1080
tactgcctgc cccgccttgt cctgggctcg atctgatctg gttctttcct ttttagacag 1140
gtcactgtct ttttcttccc tgctttctat acagccagtt gctttcaaag tgagagctgg 1200
ctgagcccca atacctcctg ctgaataaaa ctgttccctg tcacagcctg ggctacaact 1260
ggcggccga 1269

<210> 16
<211> 1177
<212> DNA
<213> Rattus norvegicus

<400> 16
ttttttttt ttttttttct accttctacc ttttattgtc acgtgaacca tggtcctaca 60
ggctgctgac aagcttggct gagcagggat cccaggggcg tcggcaggac atgaggaagg 120
gttgctggga gggcttggcc tcttccttga gaagacagca aatgtatcca gcctagatta 180
agggtagggc atcccctatc cctgtcagtg ggcctagatc tcagagcccc acattaaaga 240
ctgctaatgg gtcagaaatg ggggtccctt agatgggggt aggcagcaag gccctccctc 300
cagtgttctc attctgttcc ggtttcattt gttgtgtcca gggacggtga agcagatacc 360
agtctcaagc cccagggtgc aggaagacgg gaaatggggt gtgatgttag ggagtgtaag 420
aagggctgag gagcagggga gctgccgccg tgcagagctg gcttctgtct tcacaagaac 480
atttggccca tatcctgctt ggtcactccc aggccagaag atgggtcttc catgtccagt 540
ggctctttag gtggagtctg ggtgggctgc ttctcctcca gggagttctt gctcatttca 600
aacaacagcc actgtttcat ccagctctca aagaccttcc agtccagacc attcatagag 660
ttcttaaggt gcttcagatt ctccgggaag ctccccttca gctgtgggta gttcacgggt 720
ccagacttcg taagcaggtg catcacgtgg tcctgggtca tgttgccata cttggtaaca 780
ttcttcacgg gcgcttggag catgttatcc atggacagtg ggcgcatcag caagggagta 840
gccatgcgca tcgggctcac aggtttggca gatttcggaa gcttcatgcg aaggttctcc 900
agttgcaggt tctgggaggt gacggtcagc ttgtccaggc ggccctgctg ctggtacagg 960
aagtaagcag tggtggcctg cccagccaag agcagagcca ccaggacaga gacactggtg 1020

tacaggactc cacggttgca attgctttct ggggctctag cacgctggcc caggatgggc 1080
agctgctcat ggttagagat gaggtcgcgc tggtcatcca tgactctagc ctctagcttt 1140
tcccccaagt gctgctggtg ctgctgctgc tgctgct 1177

<210> 17
<211> 1373
<212> DNA
<213> Rattus norvegicus

<400> 17
ttttttttt ttttgttct accttctacc ttttattgtc acgtgaacca tggtcctaca 60
ggctgctgac aagcttggct gagcagggat cccaggggcg tcggcaggac atgaggaagg 120
gttgctggga gggcttggcc tcttccttga gaagacagca aatgtatcca gcctagatta 180
agggtagggc atcccctatc cctgtcagtg ggcctagatc tcagagcccc acattaaaga 240
ctgctaatgg gtcagaaatg ggggtccctt agatgggggt aggcagcaag gccctccctc 300
cagtgttctc attctgttcc ggtttcattt gttgtgtcca gggacggtga agcagatacc 360
agtctcaagc cccagggtgc aggaagacgg gaaatggggt gtgatgttag ggagtgtaag 420
aagggctgag gagcagggga gctgccgccg tgcagagctg gcttctgtct tcacaagaac 480
atttggccca tatcctgctt ggtcactccc aggccagaag atgggtcttc catgtccagt 540
ggctcactgc agttatggcg cccgcggctc ttggtgtgag ggacctcagt gccgttgggg 600
aacacacacc agcagtagcc agtgctccca tggcactgga gtggcatata gttaccgttc 660
tcatcacact tgggacggaa cgcccccggg tggacatcag ggatgtggct gacttcttcc 720
tggcacttgg tcaatacttt aggtggagtc tgggtgggct gcttctcctc cagggagttc 780
ttgctcattt caaacaacag ccactgtttc atccagctct caaagacctt ccagtccaga 840
ccattcatag agttcttaag gtgcttcaga ttctccggga agctcccctt cagctgtggg 900
tagttcacgg gtccagactt cgtaagcagg tgcatcacgt ggtcctgggt catgttgcca 960
tacttggtaa cattcttcac gggcgcttgg agcatgttat ccatggacag tgggcgcatc 1020
agcaagggag tagccatgcg catcgggctc acaggtttgg cagatttcgg aagcttcatg 1080
cgaaggttct ccagttgcag gttctgggag gtgacggtca gcttgtccag gcggccctgc 1140
tgctggtaca ggaagtaagc agtggtggcc tgcccagcca agagcagagc caccaggaca 1200
gagacactgg tgtacaggac tccacggttg caattgcttt ctggggctct agcacgctgg 1260
cccaggatgg gcagctgctc atggttagag atgaggtcgc gctggtcatc catgactcta 1320
gcctctagct tttcccccaa gtgctgctgg tgctgctgct gctgctgctg ctg 1373

<210> 18
<211> 1044
<212> DNA
<213> Rattus norvegicus

<400> 18
cggcacgagg cgcgctcggc gctgtcagtt cgtcccgctg cccctcggcc cttgctgctg 60
gctctgacgg cgaccgacgg cgggcggggc ccgggttcgc ggccgagcgg cgccggtgag 120
ggcgcggagg aggcgcacag cgggaggagg agccgtgagc ctggcacgga gcggccgcgg 180
ccatggcgta cgcctatctc ttcaagtaca tcatcatcgg cgacacaggt gttggtaaat 240
cgtgcttatt gctacagttt acagacaaga ggtttcagcc ggtgcatgac ctcacaattg 300
gtgtagagtt tggtgctcga atgataacca ttgatgggaa acagataaaa ctccagatct 360
gggatacagc agggcaggag tcctttcgtt ctatcacaag gtcatattac agaggtgcag 420
cgggggcttt actagtgtat gatattacaa ggagagacac gttcaaccac ttgacaacct 480
ggttagaaga cgcccgtcag cattccaatt ccaacatggt catcatgctt attggaaata 540
aaagtgactt agaatctagg agagaagtga aaaaggaaga aggtgaagct tttgcacgag 600
agcatggact tatcttcatg gaaacttctg ccaagactgc ttctaatgta gaggaggcat 660
ttattaacac agcaaaagaa atttatgaaa aaatccaaga aggggtcttt gacattaata 720
atgaggcaaa cggcatcaaa attggccctc agcatgctgc taccaatgca tctcacggag 780
gcaaccaagg agggcagcag gcagggggag gctgctgctg agtctgctgt tgccggctag 840
ctgcccagtg gagccacgca ctctgtcacc ctctctcctc atgctcagct gagacatgaa 900
actattgaaa tggctttgtg tcacaggaga ctttaatcct tcagattctt gtataacttt 960
gaataaatgg ttaatgttca cttaaaaaga cagattttgg agattgtatt catatctatt 1020
tgcatttgat ttctaggtca attg 1044

<210> 19
<211> 1403
<212> DNA
<213> Rattus norvegicus

<400> 19
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt ttttttttcta 60
aagtaaaaat ggtttattca cgacacatat gaggaagtgt ctcatgtcac agacggtacg 120
tccaactccc tggaatgttc atttctttgg cataaaggag agaatgaggg gaaagccagg 180
caaaggcagc taagatgggg gatgggtcgg cagctctgtc gtcatcttca cagggaggag 240
ttcaggggtc cattagtggc aggctgattc tctagaacat taggttgggg cacaggtagg 300
gccacttctg ggcaatccac catgccaagc ccttcagtcg tccccaccac acaggtacag 360
cagcgccttc tggtagtcac ccttagtgtc ttgctggatg aagtagtaca gggatttgcc 420
atatttcctc ttgaattcag atctgatttt caacatgtcc acttcactgc gagagaccat 480
gattctaatc aggaccttgt ctcgagtccc cttgcccttc atggagtcat acagccggtc 540
agcaaagtac aggggcttgt tctgaatgca ctgaaccagg ttcaggaagg cgttctccag 600
gtctcctttg acctctttcc tgatgctctc cagcatgtca taaggactgt agctcttgta 660
cctttcgaac actttctgga ggtggcacac actgcgctca gtcatgatgc tgatccactt 720
ggggacatcg gttcctttcc tcttcacccc agcatcatag agctcccggg catcctggtc 780
aatcagctcg tagtcaataa cagaaccatc ctctgcccgt ttacccttttg caagggcgac 840
caacagcttt cggaattctc cagatgtgtc agagatgatg tccttctcca gatcggtctt 900
gtacatttcc ttatacactc ggttaatctc ctgcagctcc tggttggttc ttgagcagat 960
gatctcgatg agggagtcct catcagtccc caggcccttc atggaggctt tgagctcaga 1020
ggcatcgtac tgagcaggtg tcttcaacag gcctaacatc acggtctcca ggtgaccaga 1080
caaggccgac ttcatcgccg atggcagttc ctttttggtc ctcctctggt aggcgaaggc 1140
aatgtcctgc ctctgtgcat tgctgcggtt agtcagaatg ttgacaatgg tgacctcgtc 1200
cacgcctttg gtcttgattg ctgtttcaat gttcaaagca tccctctcag cgtcgaagtt 1260
ggtgtagggt ttgaccgacc cataggcact tgggggtgta gaatgctgag aatcaccctc 1320
caagctgagc ttgcacagga tttcgtggac agtagacatt ttgaaaaaaa agctgggccg 1380
ggcacctatt gcagagagcc tcc 1403

<210> 20
<211> 5060
<212> DNA
<213> Rattus norvegicus

<400> 20
gggatgacat agagtacaac attcagagaa gttaactatt aagtcgtcag gatgaaaggt 60
caggaggcag gcctttaact gggctgtgag aatggagaaa gcacggtgca ctttaacatc 120
tgctttccca gaggaaaaag taaaggagaa acagtacaat catagaagag tcttcgtaac 180
agaagcgcga ggagagcatt atggacaagt tctgcaactc tactttttgg gatctctcat 240
tactggaaag tccagaggct gacctgcctc tttgttttga gcaaactgtt ctggtgtgga 300
ttcccttggg ctttctttgg ctcctggctc cttggcaact ttacagcgtg tacagatcca 360
ggaccaagag atcttctata accaaattct accttgccaa gcaggtgttc gtcgtgtttc 420
ttcttatttt agcagccata gacctgtctc ttgcgctcac agaagatact ggacaagcca 480
cagttcctcc tgtcagatat acgaatccaa tcctctacct gtgcacatgg ctcctggttt 540
tggcagtcca gcacagcagg caatggtgtg tacgaaagaa ctcttggttc ctgtctctgt 600
tctggatcct ctcggtctta tgcggcgtat tccagtttca gactctgata cgagcactcc 660
tgaaggacag caagtccaac atggcctact cctacctgtt cttcgtctcc tacggtttcc 720
agattgtcct cctgattctt acagcctttt caggaccaag tgactcaaca caaactccat 780
cagtcacggc ttcctttctg agtagcatta catttagttg gtatgacagg actgttctga 840
aaggttacaa gcatccactg acactagaag atgtctggga tatcgatgaa gggtttaaaa 900
caaggtcagt caccagcaag tttgaggcgg ccatgacaaa ggacctgcag aaagccaggc 960
aggcttttca gaggcggctg cagaagtccc agcggaaacc tgaggccaca ctacacggac 1020
tgaacaagaa gcagagtcag agccaagacg ttctcgtcct ggaagaagcg aaaaagaagt 1080
ctgagaagac caccaaagac tatcccaaat cgtggttgat caagtctctc ttcaaaacct 1140
tccacgtagt gatcctgaaa tcatttatac tgaaattaat acatgacctt ttggtgtttc 1200
tgaatcctca gctgctgaag ttgctgatcg gtttcgtgaa gagctctaac tcatacgtgt 1260
ggtttggcta tatctgtgca atcctaatgt ttgctgtgac tctcatccaa tctttctgcc 1320
ttcagtctta ctttcaacat tgttttgtgt tgggaatgtg cgtacggaca accgtcatgt 1380
cttcgatata taagaaggca ttgaccctat ctaacttggc taggaagcag tacaccattg 1440
gagagacggt gaacttgatg tctgtagatt cccagaagct aatggatgcg accaactaca 1500
tgcagttggt gtggtcaagt gttatacaga ttactttgtc catcttcttc ctgtggagag 1560
agttgggacc gtccatctta gcaggtgttg ggttatggt tctcctaatc ccagttaatg 1620
gagttctggc taccaagatc agaaatattc aggtccaaaa tatgaagaat aaagacaaac 1680
gtttaaaaat catgaatgag attctcagtg gaatcaagat cctgaaatac tttgcctggg 1740
agccttcatt tcaagagcaa gtccagggca ttcggaagaa agaactcaag aacttgctgc 1800

ggttcggcca gctgcagagt ctgctgatct tcattttaca gataactcca atcctggtgt 1860
ctgtggtcac attttctgtc tatgtcctgg tggatagcgc caatgttttg aatgcggaga 1920
aggcatttac ctccatcacc ctcttcaata tcctacgctt ccctctgtcc atgcttccca 1980
tggtgacctc atcgatcctc caggccagtg tttctgtgga ccggctggag aggtatttgg 2040
gaggagacga tttagacaca tctgccattc gccgcgtcag caattttgat aaagctgtga 2100
agttttcaga ggcctctttt acttgggacc cggacttgga agccacaatc caagatgtga 2160
acctggacat aaagccaggc caactggtgg ctgtggtggg cactgtaggc tctgggaaat 2220
cctctttggt atcagccatg ctgggagaaa tggaaaacgt tcacgggcac atcaccatcc 2280
agggatccac agcctatgtc cctcagcagt cctggattca gaatggaacc atcaaagaca 2340
acatcctgtt tgggtccgaa tacaatgaaa agaagtacca gcaagttctc aaagcatgcg 2400
ctctcctccc agacttggaa atattgcctg gaggagacat ggctgagatc ggagagaagg 2460
ggataaatct cagtggtggt cagaagcagc gagtcagcct ggccagagct gcctatcaag 2520
atgctgacat ctatattctg gacgatcccc tgtcggctgt ggatgctcat gtgggaaaac 2580
acattttcaa caaggttgtg ggccccaacg gcctgttggc tggcaagacg agaatctttg 2640
ttactcatgg tattcacttc cttccccaag tggatgagat tgtagttctg gggaaaggca 2700
ccatcttaga gaaaggatcc tatcgtgacc tgttggacaa gaagggagtg tttgctagga 2760
actggaagac cttcatgaag cattcagggc ctgaaggaga ggccacagtc aataatgaca 2820
gtgaggcgga agacgacgat gatgggctga ttcccaccat ggaggaaatc cctgaggatg 2880
cagcttcctt ggccatgaga agagaaaata gtcttcgccg tacactgagc cgcagctcta 2940
ggtccagcag ccgacgtggg aagtccctca aaaactcctt gaagattaaa aatgtgaatg 3000
tcttgaagga gaaggaaaaa gaagtggaag gacaaaaact aattaagaaa gaatttgtgg 3060
aaaccgggaa ggtcaagttc tccatctacc tgaagtatct acaggcagta gggtggtggt 3120
ccatactttt catcatcctt ttctacggat tgaataatgt tgcttttatc ggctctaacc 3180
tctggctgag tgcttggacc agtgactctg acaacttgaa tgggaccaac aattcgtctt 3240
ctcataggga catgagaatt ggggtctttg gagctctggg attagcacaa ggtatatgtt 3300
tgcttatttc aactctgtgg agcatatatg cttgcagaaa tgcatcaaaa gctttgcacg 3360
ggcagctgtt aaccaacatc ctccgggcac ccatgaggtt ttttgacaca actcccacag 3420
gccggattgt gaacagattt tctggtgata tttctactgt ggacgacttg ctcccccaga 3480
cacttcgaag ctggatgatg tgtttctttg gcatcgctgg cactcttgtc atgatctgca 3540
tggccacccc agtcttcgct atcatcatca ttcctctcag cattctttat atttcggtgc 3600
aggtttttta tgtggctact tcccgccagc tgagacggtt ggattctgtc accaaatctc 3660
cgatctattc tcacttcagt gagactgtca caggtttgcc cattatccgt gcctttgagc 3720
accagcagcg atttctagct tggaatgaga agcagattga catcaaccag aaatgtgtct 3780
tttcctggat tacctccaac aggtggcttg caattcggct ggagctggtt ggaaacttgg 3840
tcgtcttctg ttccgccttg ctgctggtta tttatagaaa aaccttaacc ggggacgttg 3900
tgggctttgt tctgtccaac gccctcaata tcacacaaac cttgaactgg ctagtgagga 3960
tgacgtcaga agcagagacc aacattgtgg cagttgagcg aataagtgaa tacataaatg 4020
tagagaatga ggcgccctgg gtgactgaca agaggcctcc ggcagactgg cccagacatg 4080
gtgagatcca gtttaacaac tatcaagtgc ggtatcggcc ggagctggat ctggtactga 4140
aagggatcac ttgtaacatc aagagcggag agaaggtcgg cgtagtgggc aggactgggg 4200
ctgggaaatc atccctcaca aactgcctct tcagaatctt agagtctgcg gggggccaga 4260
tcatcattga tgggatagat gttgcctcca ttggactgca cgaccttcga gagaggctga 4320
ccatcattcc ccaggacccc attttgttct cggggagtct gaggatgaat ctcgaccctt 4380
tcaacaaata ttcagatgag gaggtttgga gggccctgga gttggctcac ctcagatcct 4440
ttgtgtctgg cctacagctt gggttgttat ccgaagtgac agagggtggt gacaacctga 4500
gcatagggca gaggcagctc ctatgcctgg gcagggctgt gcttcgaaaa tccaaaatcc 4560
tggtcctgga tgaagccacg gctgcagtgg atctcgagac ggatagcctc attcagacga 4620
ccatccgaaa ggagttctcc cagtgcacgg tcatcaccat cgctcacagg ctgcacacca 4680
tcatggacag tgacaagata atggtcctag acaacgggaa gattgtcgag tatggcagtc 4740
ctgaagaact gctgtccaac agaggttcct tctatctgat ggccaaggaa gccggcattg 4800
aaaatgtgaa tcacacagag ctctagcagc tggttccgtg gctggcggac tataagaaca 4860
gtttctatta tttgctttgg tttctgtgac tgtgctctag gtgcaaagac acatattttg 4920
ttcccgttgc tcaggctggc ctcaaactct aaggctccag caatctctgg tctcagccag 4980
agacctgtaa aaatagacac ttcaaagatt atcatgaata aatatttaaa taaatagtaa 5040
aaaaaaaaaa aaaaaaaaaa 5060

<210> 21
<211> 775
<212> DNA
<213> Rattus norvegicus

<400> 21
gaattctctg ggcccatccg ttgttctcaa tggacatgac ctccaggaag ctaaagtcca 60

ggtcgtgacc aaagccaagg ttgtagagcg ggaatctgcc ccggatagcg ttgcggacat 120
tcttgaggat ctgggaacgg tccgtctccc cttcagtggg ctctccgtcg gtcaacatga 180
taagaattga ggcagggctg ctgagttctg ggtggcttcc ttgagctctg tttaagatct 240
cgattcctcg gagcaagcct ccattcaggt ttgtggctcc agccaaagaa aagcgcctca 300
caaagtcttg ggctgcttgc aaattggcgt gagacgcggg taccagtgag cccttccatg 360
actgcacttg agacccaaag aggaccaggt caaagttgtc tactggcttc atgtccccca 420
atatcttaag gagcgcctcc tttgtctgct tcactttctg gccttccatg gacccactga 480
tatcaatcac aaaaaccagg ttcttgctca tgttggtcag gttttggggg gcaaagaaat 540
gtgtaaagta attgttggcc accaggaggt cacagagctt gtctcggttc acatcgtagg 600
tcaccttgaa gtctccattc agcaaggagg tagagcacgt ggggcaggac tgctgctggc 660
tcacagtggg gcggaagagc acatgaccct tcttccccga gaaagacttc ttgatggttt 720
gagcacttga ctggtgatga cgtagtgggc aaagcgagag gtgactttgc aattg 775

<210> 22
<211> 1561
<212> DNA
<213> Rattus norvegicus

<400> 22
ttttttttt ttttttttac tgtatatgta atttaattca aattggaaca atgacgtaga 60
tatataagcc acaatccatg aaagtcttgg aggaaaacat aggagcagtt atttctgtac 120
ttgattttag tggtgagatt cttagctgtg gcatggatac acatgatcag aacagtatta 180
aataaggaga acgtcactga aaagagcaat ctgtgtgcat caaagaacat tatcaagaaa 240
gcaaagaagc aatgtgtata aaacgtccct aataggtaaa tctacataga taaagagaag 300
attggtggtt agacaaccag agggaggaag aatggagagt cactgagtaa tggttacagt 360
gtgtttgaaa ggggataaag ataagatcgt ggcctgattt tacccataaa ttgttgattc 420
tttacacaag aataatggtt agaggaatga gccacaatag cagatattat ccaaccatta 480
atgaaactta tgaccacttc ttaaattttt atttatttt ttaaaattta cttgtttctg 540
cataactttg agtgatgtta catgcttata caggatgctg gggccagtag tagccaaata 600
aaggcatcaa gacatgggtg gaaactggaa tttccagagg ttgtaagcag ccatgtgggt 660
ggtgggaaat gtccctgtgt cctttgcaag atcagcaact tttcctagta tctgtccttc 720
tctccagcat tcttacacat tgattcagtt ctaccaggct gtaagttatt ggctataagt 780
tatgagtatc agcggcatag caaaggctat atggcatcat tagacataac ctgcaaaagg 840
gcacaaatgc attcaggata gggagagctg aatgcaggca tcataagatc aggctggcag 900
gaagaaagta tcctcatctt ggaacatggt ttccccctac ttgcccatcc tgacagagct 960
ttggagtggt ggagatactg aagagaggac tctccccatg tagtaaatgt gtctttatgg 1020
agatgagaac ctgccacaga acagaatgct gctggttttg ttgtgcttga tgaagaaaag 1080
gaaggggtgg tcagcacaga atgttgggac aaaagcagca cagcagtatt ctatgacagc 1140
ggaggctgct gcagcctctg tgccttcctc attgacctcc actacgctct tgtgaacaat 1200
cttggacaca cacaggtttc tctctggaga cattgctgat aagtcagcct tggcctcttg 1260
gaagacatcc actattccca agcgctgaaa cacagactcc atgtcataat cctcttgcag 1320
tttaaatttt ggaaggaaaa cctcaacatt agtgttcttc ataaagtctg ggttggtcca 1380
ggctgttaac ttctcaaaag tgagattgct ttccaccttg ctgaggtccc cgtcattatc 1440
tgggagtagg accacgaagc tcagctccat tccttcatat ggcatcatga gcacttgcgc 1500
ctgcacctcg ttcacatggg caaggttata tgtgtcctca caacacatca tctgcactag 1560
t 1561

<210> 23
<211> 2320
<212> DNA
<213> Rattus norvegicus

<400> 23
gtatttcata aaacagagag gatcgcagga ggccggcact ctgactcctg gtggatggga 60
ctagggagtc agagtcaagc cctgactggc tgagggcggg cgctccgagt cagcatggaa 120
agtctctgcg gggtcctggt atttctgctg ctggctgcag gactgccgct ccaggcggcc 180
aagcggttcc gtgatgtgct gggccatgag cagtatccgg atcacatgag ggagaacaac 240
caattacgtg gctggtcttc agatgaaaat gaatgggatg aacagctgta tccagtgtgg 300
aggaggggag agggcagatg gaaggactcc tgggaaggag gccgtgtgca ggcagcccta 360
accagtgatt caccggcctt ggtgggttcc aatatcacct tcgtagtgaa cctggtgttc 420
cccagatgcc agaaggaaga tgccaacggc aatatcgtct atgagaggaa ctgcagaagt 480
gatttggagc tggcttctga cccgtatgtc tacaactgga ccacaggggc agacgatgag 540
gactgggaag acaacaccag ccaaggccag cacctcaggt tccccgacgg gaagcccttc 600

cctcgccccc acggacggaa gaaatggaac ttcgtctacg tcttccacac acttggtcag 660
tattttcaaa agctgggtca gtgttcagca cgagtttcta taaacacagt caacttgaca 720
gttggccctc aggtcatgga agtgattgtc tttcgaagac acggccgggc atacattccc 780
atctccaaag tgaaagacgt gtatgtgata acagatcaga tccctatatt cgtgaccatg 840
taccagaaga atgaccggaa ctcgtctgat gaaaccttcc tcagagacct ccccattttc 900
ttcgatgtcc tcattcacga tcccagtcat ttcctcaact actctgccat ttcctacaag 960
tggaactttg gggacaacac tggcctgttt gtctccaaca atcacacttt gaatcacacg 1020
tatgtgctca atggaacctt caactttaac ctcaccgtgc aaactgcagt gccgggacca 1080
tgcccctcac ccacaccttc gccttcttct tcgacttctc cttcgcctgc atcttcgcct 1140
tcacccacat tatcaacacc tagtccctct ttaatgccta ctggctacaa atccatggag 1200
ctgagtgaca tttccaatga aaactgccga ataaacagat atggttactt cagagccacc 1260
atcacaattg tagatggaat cctagaagtc aacatcatcc aggtagcaga tgtcccaatc 1320
cccacactgc agcctgacaa ctcactgatg gacttcattg tgacctgcaa aggggccact 1380
cccacggaag cctgtacgat catctctgac cccacctgcc agatcgccca gaacagggtg 1440
tgcagcccgg tggctgtgga tgagctgtgc ctcctgtccg tgaggagagc cttcaatggg 1500
tccggcacgt actgtgtgaa tttcactctg ggagacgatg caagcctggc cctcaccagc 1560
gccctgatct ctatccctgg caaagaccta ggctcccctc tgagaacagt gaatggtgtc 1620
ctgatctcca ttggctgcct ggccatgttt gtcaccatgg ttaccatctt gctgtacaaa 1680
aaacacaaga cgtacaagcc aataggaaac tgcaccagga acgtggtcaa gggcaaaggc 1740
ctgagtgttt ttctcagcca tgcaaaagcc ccgttctccc gaggagaccg ggagaaggat 1800
ccactgctcc aggacaagcc atggatgctc taagtcttca ctctcacttc tgactgggaa 1860
cccactcttc tgtgcatgta tgtgagctgt gcagaagtac atgactggta gctgttgttt 1920
tctacggatt attgtaaaat gtatatcatg gtttagggag tgtagttaat tggcatttta 1980
gtgaagggat gggaagacag tatttcttcg catctgtatt gtggttttta tactgttaat 2040
agggtgggca cattgtgtct gaaggggggag ggggaggtca ctgctactta aggtcctagg 2100
ttaactggga gaggatgccc caggctcctt agatttctac acaagatgtg cctgaaccca 2160
gctagtcctg acctaaaggc catgcttcat caactctatc tcagctcatt gaacatacct 2220
gagcgcctga tggaattata atggaaccaa gcttgttgta tggtgtgtgt gtgtacataa 2280
gatactcatt aaaaagacag tctattaaaa aaaaaaaaaa 2320

<210> 24
<211> 241
<212> DNA
<213> Rattus norvegicus

<400> 24
gaattcttgc agttacagag tatggctgtt gtctactcgg gagctcccag atcctcataa 60
ctcagggacg tgtccctatt tatggacaaa aaagtttgac gccaggtcgg gcctacatga 120
gctcttctct accctgcaag tccccagtgt atctgaggaa ggtgtattct gtcagagaag 180
caaggaagat caatgcacac ctttagtctc agccccatag gaggcagagt caagcagatc 240
t 241

<210> 25
<211> 283
<212> DNA
<213> Rattus norvegicus

<400> 25
aagctttata gtcaggcaca gctggctgtt gccaggcaac tgtggggcag agcatacctg 60
gctgttgcca agtagctgtg gggtggagct tagacagaat cccaacagat agtatagttg 120
gagagggttt cagtctgtca cagtggggag gcaggggcag tagttgagtt catggtgacc 180
agatcttgtg atggaggaaa tttacatcat catcccaggc tagaaagcag tgagcagggc 240
agagacagga gcaggttatc accttggaag acctgacact agt 283

<210> 26
<211> 642
<212> DNA
<213> Rattus norvegicus

<400> 26
ttgcggccgc ccaagtctgc cacttcaaca ctgtatctaa aacttgaaag gcactgtcaa 60
aaaccctggt gggttcctag ctttagggat ccatcgttag agtcagtaaa catggcaact 120
ctgcctccgg gcatgtgata cgtcgccagc agaggcttgc tagcccttgc cacacaacgc 180

tcagcttact caaagcactg ccaagacatg gctgccctga gacggttgtc tgggctcctt 240
ccttcctata ccttagggcg ccccccttcac agcactgggt aagcaatcag cccctcccgg 300
agaggagaag ggaaggtaaa agacaaaggt atgttttaca ctatgcaaaa cgttccagag 360
ggggaagatg aacgaagtaa caagtatcca acacagggtt ttaaaaagca acgacatttc 420
aaatgagctt gtatgggaga aagaaaagca ggttttcagg aaaaatccaa acacattcag 480
gtgtgtcttt taagtcatga gtttatcatt tattctaagt tcattgggag gaaaactgga 540
gactatcagc atagctgtct tactggggaa ggcattccca gtgaataaac atctcccttа 600
cctgagctct tggcgagaga ttctgcccag cttgactctc tc 642

<210> 27
<211> 866
<212> DNA
<213> Rattus norvegicus

<400> 27
ttttttttt ttttttcca gaaatttgcc cattctttta tttgaaggca aaaattccca 60
tggaagtctg gatgaagaga gagacaaagg cttatagaaa ataaattgaa taactagaga 120
ttctctggat ccagacatag ttggttgata aatttgttac ctatttctca ttgtatttca 180
cattatttag acatagttct tgacatctct gttttgcata ctgtctctgg ccaagagttt 240
tggtcttcct ttctaaatat caagaggaaa aatggcagaa caaaccagta atgttacatg 300
gcatgtggtt cctgagtata taatcaagca ttagcagcag ttgtagttat ctgaatataa 360
tgcatagata taatacatga ccgaagagac acaccgattt aaacaaccaa tgtcaacact 420
gaaacaaaga attttaatgc taaggcaccc aatcacggtg tctttcagtt atttgttgtt 480
ttctttagga gactggccat acacagcagg gattcaaaat tgtggcttgc agtcatgaat 540
caacatttgc atttgagtaa cttacccatc ttctttatgc ttccacaaac atagtttcag 600
ttgggataat cactgaggtg tgcacagccc tttcttcctg tagtttaggc aatatccaag 660
gctgtagaac ttggggtaag gtgtaatggt gtcacaggag gagacatcta ctcactgtta 720
aatgttgctc tgatgtaggt tggccatagc tccccatacg atctcacagg gaagccgatg 780
ggtaatagca gcaggaagat catggtctac ataactgact ctggaacttc ttgacttata 840
acttattact ttttgggttt cttttc 866

<210> 28
<211> 629
<212> DNA
<213> Rattus norvegicus

<400> 28
agggaacccg gtttctgagg ttaagaacct ggtatgaggt agaaagcaga atcggacctt 60
aggcactcga gcgtcgtgtc gaagaaacat taaatagaat agaggagtaa aggggatgtt 120
tcggataagc gctaggtcga gtcaaagaag tcttgcaaga agagttaagg gagcaagaat 180
ttctagaagc atctagataa ggagtcgtag catactgacg ttactagtaa taagtagggt 240
gagtcggaga atcatgcgct cgatggtcat aagatagtat ctatcgagga gtgtaggagg 300
cctcgtcctt cggcggaaaa gtaacgcgta gcggttaaga atcttgtcgt tcattatctt 360
aagggtaagg agccatcagt ttagaagtcg ttcccgcggt agtaagttcg cgtcgatttt 420
aataagactt tagattgcgt cgtttagtcg acgtagtaga cggttaatag taacggtctt 480
acttccttaa gcgtttcgct agttcttaag cttaattcgg ctactctaga ttttaccttt 540
ggggttaagt ttccgttagc gttgttggaa tcggttttgc ctgcggggtg gacgcccgtc 600
taggagaacg cattcgctac gaacggtgc 629

<210> 29
<211> 1145
<212> DNA
<213> Rattus norvegicus

<400> 29
ttttttttt ttttttgat ggccagtgac agtttttgct ttttttatat ttataaacaa 60
aaccaacctc ccccccaagt aactccccaa acaaacaaaa aaccagatta aataaaattt 120
acagtgaacc cagcaaacat ctgtatgtgc aattaaatac tgtgtctgtt actgtggtgg 180
cacgaacctc aaacaaacaa tatacaagtg ttctggggtt ggatcagggg tcgggggagt 240
cccaagtttt aactctgtgg ggtttgggga gacaaggtgg ggaattgaac gaatggggaa 300
atcaatttat ttttcttaat tctgtccata taaatatatt catgaagacc aaaagaggga 360
agggcagttg ggctggtgat gaagtgggag aaggggaggg cagagccctc tcaactctac 420
tcagccaaaa atatgaaaca aattaatttc atggtgggag aagagattta aaaaatgata 480

gaagatggga aggaggggga gacagaaggg gaccaaccag ggaaaagggg gacccatggc 540
aagggagtcc catgtcaagg agtcctgtgc cggtgtgaga atctgtctgc ttctctcttc 600
agccataatg tggtaagctc tggcccaatc cgccttcggc tcccggcttg gcccttgctc 660
ctattgtgcc agcccctccc gcctccagct attgagagct agctcgctcc aggatcctca 720
ggtcgtagtt ctttttagct actcgaagtt tgaagcgact cacagagttg ttgaggcgaa 780
gggaggcatt gtgggcagcc aggggactgg ggaacacagc cactatagtg tacaaggcag 840
cgaggtccgc atggcggcca ttctcagcag tcccactgtt gtccccccca cctgcaccag 900
gcaacccctg agcatcctta agccactgga tcttggcacc agacatggca agctgtgtga 960
agagtttgtc tgcctctgtg cgggtgattc cttccgggag atcagtcacc tccagtaccc 1020
ttcccagcac aacatccgct gtccccaggt cagtggaggc agacttgagt gcttgtctct 1080
tgcctcggtt tccatgcttc aatccactct gtccctggtg caccgtatac gttgactggc 1140
catgg 1145

<210> 30
<211> 3087
<212> DNA
<213> Rattus norvegicus

<400> 30
ttttttttt ttttttcac atgtcaacaa ctgctagcta ctattaaaat actgtcaccc 60
aaggaggtgg aatgtttaac agaaaatagg ctttaacaat tcatactggt cctcaataac 120
tgcagatgac tagttcaagc caactgcaaa actgagcaag aaatgcagct tgaagaacag 180
gacaataaaa tttaatcttg caacttgata gacttggagg cattccggtc aatgtagaag 240
accttgcggg cctcagagtt aaagcccagg ccagccccta ggctgtactt ccagctcatg 300
gcccggtcgt agtcctgctg cagactctgc tggagcgtat ctgaagactt cttgtccagg 360
gccatgttgg acctgacagt catgctggga ggacggttga atgacgggga tagatgctta 420
aagccgccca taagtttcag gaaattttag tttctgtttc ttcattttca aagcccgcag 480
tgtcccactg gccaaactgg gttccctgat ctatgcaggc ctcatccata ttgccttttt 540
tttccagtac cacctccaag tctgtgtctg actcctcttt ttcctcctgc caggggtctt 600
cctttactcc gctctctttt ctcctcttct ttttcttcct tttcacagcc agcccttcac 660
caactggctg ctccaccttt tttttggatt tcactttctt cttcccaggg gccttcaggc 720
tgtctatcgg gatgaaatcc aacgcttcac ttctgactga cttcttattc cctttcttca 780
agctgttctc catggagatc ttggagttga ccgggaggat gtctccctcc tgatgagtct 840
ttttcttctt cttctttttc atgctgtgat ctctggggct cccctgcttc cttttgtgcc 900
ccaaggccgc ctgctcttcg gcctctgccc cctctaagca tgagtgcaaa gcatccccag 960
cctcagggat ccaagagtcc tggggaggaa aagcttccat gtccggaagc ttcttctcct 1020
tcctgtgctt tttaggcttc ctaccagctt tgcttacctc cttggcatgc ttggagtctg 1080
gggaagtctt cagccctgag ccttgggagg caacctttga taaggacttc cgcctcttct 1140
ttttcttctc tctgatgagg ccttctgctg actgctcaag gacctgcctt ctaaggctag 1200
gtgactttat ctgtcttgtc catgtaggct catccttgcc caggtactca tccaagtgtg 1260
tgctacagga ctttttttctc ttctttctct tgcccagtga catctcaggg acctgcacct 1320
cacccacatt gttaaaaggg gatgtagccc ttggaggaga aacatctatg aagtaatcat 1380
tattgtttaa gactgagtac tgagtctctg gttctgagac atttgccacc ttctttttct 1440
tcttcttctt tttcttcttc tctgggagcc gtgggcccag gtcttctttc tgagtcttgt 1500
tgaccattac tggtctatta gcaggccaag catccccacg tgagcacccg cgcagccgcg 1560
acccggaagt cagcttcgaa tttctggccc gccccctcga aatcgttctc cttccgggtc 1620
gcagcttcgc ggcgccctgg gttgctgtag aaacggcgtc catggccgtg cctagacaag 1680
catccagcct cagcgtgctg cgtgaggaga cgggaggcgc tgcggactcg ccggtcacta 1740
cacgaatgcc cgggctcgca gggtcgcctg ggtcccccga agttctcgtg ttacccgcgc 1800
aggtcgccga gcctccgggg aagaacctgt gggagcagat ctgcgaggag tatgaagccg 1860
agcagcctac ctttccggaa ggatataaag tgaagtttag tttcctgcct tgcccggaat 1920
gctacgcttt cacgtggcca tcttcccccgc agttgttgac atgcctagtg accgtgacct 1980
ctgacacccg ttttcccact tttgccagga tctgtatttt aacttacttc agagtcctct 2040
tagttgtctt ggtttggggg tggtttgggg gtgttgggat aacagatggg gcaaggctgt 2100
agccctactg agctgtttcc agaggccgtt gtcaggaagg atttccagtg ttacagcccc 2160
agagtataac agcagcgccc tgttagctta atggtcccca ttggttctgt ggctgcggct 2220
caccaggatt ctcccattca aaaggcccag acatggctga cagcctcctc tgtaggtctg 2280
actgacaagc taccacgcgt cttaggtaaa tagtaaagcc tttatttttct tgttaagaac 2340
agcattttga aaataaaacc tatctgccca tgcttaacaa cctttaaagt ctgtgatatt 2400
ttatatacag ccctgtacat actgattgtc tggaaatttc ttaaacagtt tttgtttata 2460
agtatgcaag tcagccagga tgaggggaag agtgagggta cattataaaa tacacattaa 2520
tacatttaat aaatatatat tatctatcaa aaacgagcca tagctcttaa tgaataaagc 2580
acctgccaag ggctctcatc agctcacagt tgctacatcc ttggatgtgt aaatgccagt 2640

gccccccttct actttgccat ttggcaaatt caaaagacaa ctcttccacc accctgcact 2700
tgttccctgg ccttgacctc ctctgtgtgg gggtggggca gacaacaacc agatcttaac 2760
tttagaaaca gctgacacat tggagcccct ccctctgcc attgtcctgc taccttggca 2820
actgactcca gacctctatg gagtcttcac tcaggagggg acagagcggt ggttatagtc 2880
ccaatatggt attagtaccc gggcatgcca agttgtgctt gcagtttggg gttattcaca 2940
gatgactttc tagaccattt tccccaacca agtgttgggt gtatcaacac ttaaacaggt 3000
gccatgggat tatgcatttc agccttgctc tgtcagaagc tggctgccac agtatctggg 3060
tggagttgcc tcgtggtcct cctcgtg 3087

<210> 31
<211> 434
<212> DNA
<213> Rattus norvegicus

<400> 31
tgtacaatgg gggataaaag tgtcaaatga gatgttgcta tagtttcatt tcttttgccg 60
tgatagagca ccctgacaaa aagcagcacg agaggaaatg tatctggctt acgattccat 120
gttaaagccc gtcattgatg aggtgggtcg gggagtcaag gtaagactgt aaacagctag 180
tcaatcacat ccacagtcag agacagaagg acacaaattc atggatactt gctcctttgc 240
actcagctca gtttctccac tcttacacag ttttaaatgc cctgcctagg gagtgatgcc 300
acccacagtg ggctggatgt tcccacatca gttatgacaa tctcccacct catgcccata 360
ggccaaccca atgtagacaa tctctcattg agactctctt cccaggccat gtcaagctga 420
cagttatagc tagc 434

<210> 32
<211> 221
<212> DNA
<213> Rattus norvegicus

<400> 32
agatctctta agtgaaaata gaaaaatgat tactaacgag aagatagacg cctacaacga 60
agctgcagtc agcattctga acagcagcac caggacatcc aagtccaatg tcaagatgtt 120
cagtgtttcc aaactcatcg cccaagaaac catcatggag tctttgggtg gcttacacct 180
tcctgaatca agcagagaaa ctagtgcaat gattctcatg a 221

<210> 33
<211> 581
<212> DNA
<213> Rattus norvegicus

<400> 33
tcatgactcc cagcattgac attcccctac aatagggctt tgagccttca caaaaccaag 60
ggcctctcct gccattgttg ctcaacaagg ccatcctctg cttgatatgc ctctcgagtc 120
atgggtcatt ccatgtgtaa tctttggtgg tttagtacct ggcagctctg catggttgat 180
attgttgttc ttactatgga gtgacaagcc tgttctgctt gttcaattat ttgtctaact 240
ccttagttga gtaccctgtt tgcagtccaa tggttgggtg tcagaatctg cctctgtatt 300
tgtcaggctc tggcagaggc tctcaggaga cagctatatc tggctccttt cagccagcac 360
ttcttggcat tagcaataat gtctaggttt gatgactata aatgggatgg atccctaggt 420
gtgatagttt ctggatggcc tttccttcag tcactgctcc acattaggtc ttgatatttc 480
ctccttattt tgtttccctt tctgccccat cgttgtgccc ttttgataga ttttgcagtt 540
tagaaataca atttacgtgc aggtttattg cattcagatc t 581

<210> 34
<211> 221
<212> DNA
<213> Rattus norvegicus

<400> 34
tcatgatgaa gaaatgggtt ctcggcaata ggcaaaggca ggatgagagc agaggggtcc 60
atgggggtcg aaggctgccc atgggggtgg ttctatgctc tgaccatttt gagatgaact 120
aataatgttc cggcagtggc tatcccctaa caaagatcac aagccgccta gtggagggaa 180
tggaatctga actctggtac cagcctccaa gatccagatc t 221

<210> 35
<211> 370
<212> DNA
<213> Rattus norvegicus

<400> 35
gaattcacta gaccagcata ttgctctatg ctgcctttcc agcgctgtac tgcctgtagt 60
ggaacagact cttggagtcc acagtacgag ctttctgcac agcctcagca aaaagtttgg 120
tcacctggaa attggtgagc agagcaattc cactgtccac agctgtcctc cgaatcacat 180
aattatcatg gacaaatttg gtgttgttat tggggaggtt aatcactagg tcaatgcttc 240
cgtctcttat caactttctg atggaagaga ggctgggatt ctgtccttcc tgagatggcc 300
aagccactgg ggtggcagga acattgttgg cgttgagcca gtctgatgtg gcttctgtgg 360
caaaaagctt 370

<210> 36
<211> 1404
<212> DNA
<213> Rattus norvegicus

<400> 36
ctagtccccg cagcctagcg cgggcggcgg cgggcgatgg aggagagcag agccccgggc 60
cccgccgtcc tccagcgcgc tccgctgcaa ccccgcagct gagcccagag gctccggccc 120
tgtgcgccct accgcggccc cgccactatg gccggcgtgt gggcgccgga gcactcggtt 180
gaagcgcaca gcaaccagtc aagtgctgcc gacggctgcg gctctgtgtc cgtggccttc 240
cccatcacca tgatggtcac tggcttcgtg ggcaacgcgc tggccatgtt gcttgtgtcg 300
cgcagctata gacgccggga gagcaaacgc aaaaagtctt tcctgctgtg cattggctgg 360
ctggcgctca ccgacttggt ggggcagctc ctgaccagtc cggtggtcat cctcgtgtac 420
ctgtcgcagc gacgctggga gcaactcgac ccatcggggc gcctgtgcac cttcttcggg 480
ctgaccatga cagtgttcgg actgtcctcg ctcttggtgg ccagcgccat ggccgtggag 540
cgcgccctgg ctatccgtgc gccgcactgg tatgccagcc acatgaagac tcgcgccacg 600
cgcgcggtac tgctgggtgt gtggctgtct gtgctcgcct tcgcgctgct gcctgtgctg 660
ggcgtgggcc gctacagcgt gcagtggccc ggcacgtggt gcttcatcag caccgggccg 720
gcgggcaacg agacggactc tgcgcgggag ccgggcagcg tggcctttgc ctccgccttc 780
gcctgtctag gcttgctggc tctggtggtg acctttgcct gcaacctggc gaccatcaaa 840
gccctggtgt cccgctgccg ggccaaagcc gccgcctcgc agtccagcgc ccagtggggc 900
cggatcacca cggagacggc tatccagctt atggggatca tgtgtgtact gtccgtctgc 960
tggtcgccgc tattgataat gatgctgaaa atgatcttca atcagatgtc agtagagcaa 1020
tgcaagacgc agatgggaaa ggagaaggag tgcaattcct tcctaatcgc cgttcgcctg 1080
gcttcgctga accagatctt ggatccctgg gtttatctgc tgctaagaaa gatccttctt 1140
cgaaagttct gccagatcag ggaccacacc aactatgctt ccagctctac ctccttgccc 1200
tgcccaggct tctcagtcct gatgtggagt gaccagctag aaagatgatg aacaacctga 1260
agcggagttt cattgcaata cctgcttccc tgagtatgag aatttcttcc cccagggaag 1320
gataactgaa tcattttgga ttgtatcttc tttcggcctc atattttaag ttttccttgc 1380
cattaaacac accgagacaa gctt 1404

<210> 37
<211> 443
<212> DNA
<213> Rattus norvegicus

<400> 37
agatctctac accgcaaaag gtctcttccg tgctgcggtg cccagcggtg cgtccactgg 60
catctacgag gccctagaac tccgagacaa tgataagacc cgcttcatgg ggaagggtgt 120
ctcaaaggct gttgagcaca tcaataaaac tattgcacct gctctggtta gcaagaaact 180
gaatgttgtg gagcaggaga agattgacca gctgatgatc gagatggacg gcacagagaa 240
taaatctaag tttggcgcac atgccatcct gggagtgtcc ctggctgtct gcaaggctgg 300
tgccgtggag aaggggtgc ccctttaccg tcacattgcc gacttggccg gcaaccctga 360
agtcatcctg ccggtcccag ctttcaatgt gatcaacggc ggttctcatg ctggcgacaa 420
gttggccatg caagagttca tga 443

<210> 38
<211> 1381
<212> DNA

<213> Rattus norvegicus

<220>
<221> misc_feature
<222> (1379)..(1379)
<223> Wherein n may be a, c, g or t

<400> 38
gggccctcc tgctcgctgc tgctggaggc gtttcggcga tattacaact atatttttgg 60
tttctacaag agacatcatg gccctgctaa atttcaagat aaaccacagt tagagaagct 120
tctggtcttc attaacctcg aaccgcagtg tgatgccttc cctagtatgt catcagatga 180
gtcctattct ctacttgtac aagaaccagt agctctcctc aaggccaacg aagtttgggg 240
agcactaaga ggtttggaga cctttagcca gttggtttac caggacgctt atgggacttt 300
taccatcaat gaatccacta ttgctgattc tccaagattc cctcatagag gaattctaat 360
tgatacatcc agacactacc tgcctgtgaa gacaattttt aaaactctgg atgtcatggc 420
ttttaataag tttaacgtcc ttcactggca catagtggac gaccagtctt tcccttatca 480
gagtatcact tttcctgagc taagcaacaa gggaagctat tctttgtctc atgtctatac 540
accaaacgac atccatatgg tacttgaata tgcccggctc cgagggattc gagtcatacc 600
agaattcgat agccccggcc atacacagtc ttgggggaaa ggtcagaaaa accttctaac 660
tccatgtttc attcaaaaaa ttagaactca aaaggttgga cctgtagacc caagtctaaa 720
tacaacatac gtattctttg acacattctt caaagaaatc agcagggtgt ttccagacca 780
gtttatccac ttgggaggag atgaagtgga atttgaatgt tgggcatcaa atccaaacat 840
ccaaaatttc atgaagaaaa agggctttgg caacaatttt agaagactag aatcctttta 900
tatcaaaaag taagtcatct gaaagcctaa tcaccactgt tttcatacaa gtccaagctg 960
cgacttagct ctctgcttta cttctcatct tccccactgc ttgcaagagt ggagccaaga 1020
acacctagga ggcagtaagc attttgcagt aactactgaa atagagggag aagccatgcg 1080
cccgctagga gctctggctg ccctttgtct tttgcactat ccaggggctg gaactcactc 1140
cctttgtcct gagtgacctg gggcatctct gctccttaca cagtgcagtg acatttccaa 1200
cattccacag ccagggaatt ggtactgaag tggtggctgc cttgttagaa aacacagaca 1260
gaccacttcc caaaagtttg gtggacagtc tgttctctaa gaatcagcac atttttcccc 1320
atagggacca gaccacactt aggcatcatg ggccatgtgg agttgcaaat ctcttttana 1380
a 1381

<210> 39
<211> 2229
<212> DNA
<213> Rattus norvegicus

<400> 39
ttttttttt ttccagagca gaggtctttt ttaatcaatc acaaagtact ttaaaatctc 60
ataggggaca gccttgaatc atctatccac gctgattgta ccggtaagta gaacaggata 120
agagcaattc gccagctgca gcacagtctg gtacacgagc agcccggggc cagccatgcc 180
tggcgttaca atgtgctctc acaaaagtaa ctcatggaac tcaacgtgaa gtcgcgcttt 240
ttttttttg gttctttttt ttccggagct ggggaccgaa cccagggcct tgcgcttcct 300
aggcaagcgc tctaccactg agctaaatcc ccaacccctg aagtcgagct ttaaataata 360
acctgagtta aattcccagg gaaaggaggg cactgactcc tacaggctgc tctctgacct 420
ccacaagtcc caggatacat ctgagcccgt cccacacaaa ctagcactca atatggaact 480
tttattcatg tgatttctgt acatcaggga gtacaagagt aaacctttac aaatggtgct 540
gattttacca caataaatga caaaaccaaa gcagtgtctg gtgacagtgg cagggcttta 600
aggttcaaac ccagccaaga agtttgttac gatttccttc agctttgcat ccgactgttc 660
tgagattttc ccatcagacc tgatattgcc caagaggctc tggtgctggc tcacaacatg 720
agacaagaaa gcactctcga actttgtgat cttactgggc tccagtttat caagataacc 780
ccggacgcct gcatagatga cagccacctg ttcttcaata gccatgggag agtactgtcc 840
ttgctttagc agctcggtca ggcgcacgcc acggctcaag agctgctgag tggcagcatc 900
cagatcagaa ccaaactggg caaaagcagc gacctcccgg tactgggcca actccagctt 960
catggtgcct gccacctgct tcatggctct ggtctgggcg gcagatccga cacgggacac 1020
agacaagccc acattaatgg cagggcggat gcctttatag aacaattctg tttccaagaa 1080
gatctgtcca tcggtgatgg aaataacgtt tgttggaatg taggcggaca catcaccagc 1140
ctgtgtttca atgactggta aggcagtcaa agagccacca ccaaaggaat cgttcatctt 1200
ggctgctctc tccagcaggc gagagtgtag gtaaaacaca tcaccgggat aggcctctcg 1260
acccgggggt cggcggagca gcagagacat ctggcggtaa gcaacagcct gcttggataa 1320
gtcgtcatag atgatcagag cgtgcttgcc attatctcgg aaatactctc ccatggagca 1380
gccggagtaa ggagccaagt actgaagcgg ggcagcatca gaggcagtgg ctgacaccac 1440

aatggtgtac ttcatggcat ctgcgtctgt cagtctcttc accaactgag caacggtgga 1500
ccgtttctga ccaatagcaa cgtagatgca gtacagtttc ttcttctcgt cagtcccatc 1560
attgaaacgc ttctggttga tgattgtgtc aatagcaatc gaggttttcc cggtctgtct 1620
gtctccaata atcagctcac gctgacctcg gccaatcggc accaggctat ccacagcctt 1680
gatgcccgtc tgcattggtt cccgcacaga gattcggggg ataattccag gggctttcag 1740
gcccactcgt ctgcgaatct tggaaccaac tggacccttc ccatcaatgg catttcccag 1800
ggcatcaact acacggccca acagttcatc gccaactgga acgtccacga tggctcctgt 1860
tctcttcacg atatcacctt ctttaattag cttgtcattc ccaaacacga caactccaac 1920
attgtcgggt tccaagttca gggacatacc ctttaagccg gaagaaaact ctaccatctc 1980
ctcagcttga acgttcctca gtccatgcac tcgggcaata ccatcaccaa tgcttaagac 2040
acggccagtc tcttcaaggt caacagaagt atcagctcca aggatccgct cctcgagaat 2100
ggaggacatc tcggcagtgc cagtcttctg aagtcgagtg ttagaggcat ggagatttct 2160
tgtaccaaca aaagatgacc ccaaggcatt tttggagacc agtcccgccc gtcgagggag 2220
ggcacggcg 2229

<210> 40
<211> 4651
<212> DNA
<213> Rattus norvegicus

<400> 40
ttttttttt ttttttttgc ttgtttgttt gtttgtttac ttcatgaaat gaaaacagga 60
aagcatatta aaactcaaaa caatgaaaca gaaaacataa aaggtagtct aatagtcaga 120
aaacactggt aaactagcgt gtgttaagta tcagggacat atttatacaa aaaagtaagt 180
ctgagggaaa attctaccca gtcattcttc tcccagtccc agtaagtaac aaagtggctt 240
atcctattgt acctgccatg gtttaatgct gtacaagtgt ggcctgctga gcacatccag 300
gacttcttgt gcatgtagtt atcttgccat ggaagtgtct tgatgcagag ctgctagaac 360
caactgtctg gtcagttggc tccaggcaac tctgtgtaat acacgctacg ggcaagcttc 420
ttcctttatg gaagagtgca tgaatcaaat caataaagac aagaatccca gagttcccta 480
tgtcagcaag cgccataggt ctgtttttt tccccctatg tacctcacca tgaggcaacc 540
ttctgttcca aaaggacaat gttctcgatg gataccttc agtggaatct tcacagttcg 600
aagaccaata gatatacctt caacttccca aagagcatca ggggaggggc ccacttcttg 660
gctcagtgac aaagcccgtc agagttatgc tttaaagcca gtctgagggt ttgacatttg 720
acacaatgtg gacatggctg tcaggagcag aggtgctgcc atggcttggt cctgggcctc 780
tggaaagtcc ggtttgtaac tggtacaatg cctcttcaat gtcatgctcc actaaactca 840
ctgcttggcg gtgccacccg caggtactct gcattttcag ctgtggggcc cttaaagatg 900
ccattcggct tggcttcttt gggaaagaag tcctgctggt agtcagggtt gtccaggctc 960
atttggtggc tgcctttctg gatccagagg gcagagctgt caaacccact actgaggcag 1020
gtcggctggg cagtgttgag atactcaggg ttgctcaccg cattgctatg gggattttga 1080
taatgcaggt ctcttccagg agctggatgc aggggctgat tgtgatagac tgggttctgc 1140
acagagccag ccggcctctt gggaacagat tggtttatat attcaggcac gggaaggaat 1200
gtgtcatcta tgttgtcctc tgtcaggacg ctggtgggat cggagctata ccgttgcaag 1260
aaggcgtctt ctttgacacg gcagctccca tttctattaa tgcaagccac agtggaactg 1320
ttgctatttg cactcagaga gctcaagagt ggagtccgtg acgtggatgg gctgttgaag 1380
aagccttgct gtgggatgag gtattcatca gcatcaacta cgtcttccat gtcctcctcc 1440
tccatcaggg ctcggtaaaa gttggagtct gtagggctcg gcaaatgcat cctttcatcc 1500
ccctggataa caaggtagcg ctgtgggtct ctggccattt tggagaattc gagaatcaac 1560
tctcggaact ttgggtggct atcagcatct atcatccagc acttgaccat gatcatgtag 1620
acgtcgatgg tgcagatagg tggctgtgga aggcgctctc ctttctctag gatggatgag 1680
atctcacttg cagggatccc atcataaggc ttggacccaa aggtcatcag ttcccacacg 1740
gtgactccat agctccagac gtcgctttgg tgtgtataaa ttcggtgtaa aattgattcc 1800
aaagccatcc acttgatagg cactttgccc ccctctgcat ggtattcttt ctcctcagca 1860
ccaagcagtt tggccagtcc aaaatctgtg atcttgacat gctgtggtgt ctttaccagt 1920
acattcctgg ctgccaagtc acggtgtacc aaacgccggt cttccaggta gttcatgccc 1980
tttgcaatct gcacacacca gttgagtagg tactgggagc caatgttgtc cttatgttct 2040
cggacatagt ccaggaggca accatagggc atgagttgtg taatgagctg gacagtggag 2100
gtcagacaga tgcccaggag gcggcataca tgagggttgt ccacactggc catcacgtag 2160
gcttcatcaa ggatttcctt gttggctttg ggagatgtgg cttctcttaa ctccttgatg 2220
gccacaggga ttttcacttt ctcgccttct gggatccaga gacccttata cactgtgcca 2280
aatgctcctg aacccagaac tttgatcttt ttgaattctg tttcctttaa tatcctcaag 2340
tgggcttggt tcggagcttc tccgctgggt gtgagaggtt ccacgagctc tctctcttga 2400
agcaggcggc gtagtgtacg ttttcggaca agctgacgtc gacgcatgaa gaggccgatc 2460
ccaagggcca ccactactat gaagaggagg ccacccacaa tcccagtggc gatggatggg 2520

atctttggcc cttctggttg ttgacatcct ttaaggcctg gcccagcaca tccataggta 2580
cagtttgcat ggcagaggtg gcagacgtta ttggcatctg caaacttcca gaccagggtg 2640
ttgttctccc ccatgatgcc cgaagggcag gtcttgacac agtggggacc atcaacatag 2700
tgggcacact tgatgcagtt gtctggcccc cggcctgtac aggtgatgtt catggtctgg 2760
ggcagacatt ctggatggca ctggatgcat tcagaatttt ccacaaactc cctcggttcc 2820
ccctccagga tgttgcactt gtccacgcac tccctgcctc tgctcacatt ctggcaggag 2880
acacagtccg tgggctcagg gccccagcag ccttccgagg agcataaagg attacagacg 2940
tggttcgtgg ccttgcagtc cttttcagct ctgttgttca tgattttggt cttttgattg 3000
ggcgtcccga agagtttttt ccagtttata gtgtttgcgt agcacaaatt tcggttccca 3060
gaaataatca catccccatc actgatctcc ttgagggaac gcaaccccag cgatgttatg 3120
ttcaggccga caaccgccag agaaaactga ccatgttgct ttgttctgcc acgaattatt 3180
tctaggttct caaaagcatg gaggtcagtc cagttttcag gccaagcctg aatcagcaaa 3240
aaccctgtta tttccttcac agttttgaga atttctagtt cccgtgggtc tagaggagga 3300
gtgcgggtga aagaatcccc cttaaaggcc actggcagga tgtggaggtc cccactgatg 3360
gcagtgcagt acttgaagtg tttgatgttt gtagcattta tggagagtgt gtctttaaat 3420
tcaccaatgc ctatgccatt gcaaactttg cggcagggcc cgtcacattt tttacacttg 3480
ctgactccat cttcttctac ttcatagtag tctggcccac aggcccggac acacgagccg 3540
tgatctgtca ccacgtagtt tctggggcat ttcttcacac aggtggcacc aaagctgtac 3600
ttcccctcag ggttgacatc catctggtac gtggtggggt tgtacagcat gagtggtggg 3660
caggtgtctt tgcacgtggc ttcatctcgg aacctgtggc agaccagaca gtcactctct 3720
ctgggccctg tacaccctgc ggcacactgg ttgtggcagc agtcgctagg ggacctgcca 3780
cgacaacgcc gggaacattg ctgggcgcag atgattttgg tcaatttctg gcagttctcc 3840
tctcctcttc cccagcagct tccattggga cagctcggat cacatttcgg gcagcccgtc 3900
aggtggcgct gtacgtccat tgacatgttg ctcagaaaga catcttggac gatgtccctc 3960
cactggatgg tctccatatt gcagaggatg gggttgttgc taaatcgcac agcaccgatc 4020
agaatttcct gtaagttccg catgggcagt tccctaagcc cagttttgtt ggttccatag 4080
ttggacagga cggctaaggc gtaggtgttt tcgtagagag catttcccct gatgatctgc 4140
aggttctcca aagggattct ctccacggtg ttcagggcaa tgagaacata gccagccacc 4200
tcctggatgg tctttaagaa ggaaaggtca taattccttt gcacataggt gatttccaag 4260
tttccaagga ccacttcaca gttgttgaac atcctctgga ggctcagaaa gtggtcttca 4320
aaggtgccta gttgggtgag cctgttactt gtgccttggc aaactttctt ttcctccagc 4380
gccccacctg cggcgcagag cgcagccagc agcagcagta gcttggttct cgcagtccct 4440
gagggtcgca tcccggctcg gcagtcgttg gctctggctc tccgggatta atccgagtca 4500
gactgagtcc cacggtcgtg cccggtgact gcgtcggcaa cgacgacggg acccggactc 4560
agactcgcgt ccaggtgacc cgtcgcctgt cttggtggcg gtagcctccg ggactggctc 4620
cagacgctcg agcccaggaa gagcgcacag t 4651

<210> 41
<211> 1726
<212> DNA
<213> Rattus norvegicus

<400> 41
tccgatctga gcagacagct acagccaaca gatggcgtgt aagtttggag ctgtcactga 60
cttaaggtgc cttatgtctt agccttccct aatgtaaggt gggtgggcat aactggaaca 120
agtctgttaa gacttgctct gaggaggctg acagttcagt aggtgacatg taggaaggat 180
tcagggcagg gaggaaccac tgcatctttc atccgacaca gtagttactg actaaacaac 240
agtgagcact tgagtgcact gagtgcaact gtgcagggcc tggtgcagga gaactctctg 300
gactgaagaa ttccgtgaaa gtataaaagc cactacgacc agaactgccc ctcggaacgg 360
ctcaaaggag tcaagagtgg gtaagctgag acgggctgga gacaggacca gggtcaagaa 420
ctgggggggac accgacatct gaacgcgtcc agtcctctga gcccttgtcc tgaccaattt 480
aagatctgta tcctggctgg aatcgagcag tctcttcaaa aatgagttct ttgagcttct 540
ccttaggtaa gtcgtccagc tccatgtcaa acttgaatgg tgcttcagca atgggctcat 600
cacttgggtc ataatactgc tccaggtacg ggtgggccag agcctgttca acttcaatcc 660
tcttgtgagg gttaaatgtc aacattttat ccagtaaatc cagagctttg gagtcagcgt 720
ttgggaacaa cctgttccac ggcaccttat ttttgtgcgg gagagaaagc aaatagtttc 780
tagcttttaa atttattata caattcagat cttcctgtga tggagatcca agaataccca 840
ggatgtgatt cagctggtca aggtaatgct ttcctgggaa gataggcctg ttggatagca 900
tctctgccag gatgcagccc acagaccaaa tatcaatgga cttggtataa cccttggaat 960
tcaacataat ttctggagct ctgtaccaac gcgtggctac atactctgtc aagaaccctg 1020
tatgatcatg gtctggatct gcaacacggg caaggccaaa gtcacagatc ttgagatcac 1080
aagtggtgtt cagcaggagg ttggaaggct tgaggtcacg gtgcagaaca ttagctgaat 1140
gtatatactt taatcctctc aggatctgat aaagaaaata gcagatatga tacttgctga 1200

ggtgctgtgt cttcaagagc ttgtaaagat ctgtctccat gaggtcctgt actatatata 1260
catctttcat ctgctcaatg gttggtgccc ggatgatgtc attgatgccg atgatgttct 1320
catgtctgaa gcgcagtagg atttttatct ctctcagggt tctctgacag taggtctggt 1380
gctcaaaagg actgattttc ttgatagcaa ctcgaacttt gttgagatta tcataagcag 1440
aacaaaccat gccgtaggcg ccttctccga tgtacgagag attagtgtag cgcggcccca 1500
cgtcgaacac ctgcccgcgg accatctccg ggcccgccgc cgccgccgcc gccatgttgg 1560
ctgcacagcc tccgccgcgt tgggctcgac gcttcgcgtt accgctcgac ttgtgctgcg 1620
cttcccacag gaaccgcgcc gccgcccgtg tagccggctg gcggcgatcg ggaacgagga 1680
gggaggacaa cacagaagag agaactaacc gccggtagaa ccacgg 1726

<210> 42
<211> 526
<212> DNA
<213> Rattus norvegicus

<400> 42
gtgcacagag gggactcaac ggtgtgccgc tgctcagact acatctggcc cacaaatgtt 60
cttctagagc caccagaatt taagattatt ggctttaagg accacataaa tgtgatgatg 120
gagtttccac ctgccactta caagctattc ggggaaagct tatggaaaag actggagtct 180
acatccttcg tcatcgagga acagacagag gacagcatta gggtgcacaa gccccaaatg 240
aataatgtca ctgggaactt cacgtatgtc cttagagact tacttccaaa gacaaactac 300
tgtgtgtctg tttattttga tgatacacct gtaataaaat ctcccttaaa atgcaccgtc 360
cttcagcctg accaggaatc aggtatggct aggcttttaa aatttgcact gttgttttga 420
tggaaaactt gctgaaagaa aaaaaaaaac tcaagttctg gtacactaaa tgtacttctt 480
ccaataaatg cacatcactg agctgtttaa aaaaaaaaaa aaaaaa 526

<210> 43
<211> 3520
<212> DNA
<213> Rattus norvegicus

<400> 43
ttttttttttt ttttttgac aagataaaga gtctttattg acatagagct ccacgtgacc 60
tcttctgtcc tgccctcctt gcaaacatac taggtgtccc aaaggtaggg acacgagcag 120
acagtcctga gcctggtccc gtcctccaga atgcagtcag actgcagtct gccatctgcc 180
atccctatca tctggccacc aaccagaacc agccccacag ttcccttgtg gtctcgcctt 240
ggctgccagt ggtggtgtcc actgggacct gccactaggc tgctgtgttt gtttactggg 300
atcccacttc cacatcctgg gagccctggc ttctggccac atgtgggtaa ctggcagtga 360
ctttgggcaa tcaagtttgc gttcttgttg ctttccacaa ctgggccaag ctgggacagc 420
aggctctgct tctagtctca gtccgagctg ttcaatgaat agcctccttg gggcagtatc 480
taccctccct taactcaaaa tttccactag ttagggcctc ccaagccact gccaggccag 540
ctgcgagttt ctaggaccag cttccagctg gagaacccga cagctatgcc aggactgctg 600
tgagccttgg gcaaacggtc tattgggtgg acagaatggg cctgagcagg tagggcaaca 660
agagctagga gagcccaggg cttaagaata tcagcactgc tgtgggagaa agcaaaatga 720
gtccctgaat cccttgtgag ggaggagagc ccaggccaac ggtaggggag acagccaggc 780
tctgaacttc tagggtcagg ccaagttcac atcttcactt caccattctt tcgatttctg 840
ggaaacctgc cagctgggct gtctctcagg aagcacttcc ctggcttgga ggaaccccgg 900
ccttagcaca gacctcagca acaacagcac actcacctaa gacacagtga cgcccagagt 960
gcccacaggt acctcagtag tctggctggg aacaggagag tggccagggc ccttgcccac 1020
ccctgacaaa ttggagggtg tcctgggtgc taaggtgagg ttggcttcct gtgacatttc 1080
cccaggacag ctctccaagg tccccgagag attccccaag gatggtgatt tttcatcata 1140
gcaacagccg cagccagggc tagcaacgac atggatctga ccatcttcct cctggctgtg 1200
gtgttgcttc aggtggccac acagatggca ggtgagggac gagtacacaa tgccaaggcc 1260
caggtcatcc ccaaagggct tgggcacctg ctctgaagga ggaggggcct tcagccaggt 1320
gcctccttta agccccagct ctagaccaag gcattctggg gtgctattgg gtggggctga 1380
gttcagggga ctgggtggca gctccatgtc cagtccgaag gtgaataagg gcatggagtt 1440
gggggactgg ttaggaacag ggttctggaa gggcttgtac cctccacatc cactgtcagt 1500
ccctgctgct gctgtgtccg tgcagacgcc actgctgctg agcaggctcg agaaagcctt 1560
gtaaccagtg tctccagaag gcccgacacc aggcacccac ctggcctggg acgcaccctg 1620
cttcactgcc tgcacaaact cttggtagcc actggtaggg gctggggtgg agccagctgt 1680
cccgtgctgc aggacactca tgtgaaggat ctgctcccag ctctccgctt gctgcattgg 1740
tggccctgaa gaatgggggt caaccgggct cagaagatcc ccttcttcca gatgtccagc 1800
ctgcttctgt tctgaagcca gctctccagg atttggggcg gggctggaga agtcactaaa 1860

actccggtag gcaggattgt ctgaaatgac aaggggacc tgtgtgcagg ctgtgccagt 1920
tgctctctca gggtctgggt gtggaggctg ctgccctgtg acctggcatg tggtctcact 1980
gggccccgtg gggaagcagg cccaggacgt agaagcttgc ccactttctg aaggcagaag 2040
ggaggatgac tctgccatgc tcgactggcc aacgcctcca ttctcagccc ccagcaagtc 2100
tgaaaacagg ttctcagtga gccgggccat gatgtctgcc tgactctcct ggaagccccc 2160
tccgctgttc tcaggtgaca tgctcaggtc ccctttgacc atctcatcct cttcctcctc 2220
cacattctgt actggggcct caaacagctc catacagcgc accacactga catgaacgtt 2280
ctctggccag aggacggtcc tgctgacctc cgcaggatac cagcctgctt tttcaggact 2340
ctggagaggc ttggttttgg cagccttcgg ggattctctc tctttcttca ctctatgctc 2400
cagcaagcag ggcagcagct tggttagaca agtcttccag tgccggctct tggttgactc 2460
ctggcttcgg gtctgcttct cccagaggga caccttcgtg tcctgaatga tgatggctgc 2520
taagggactg cgtgctggag tgggaatctg gtcccaccat atcttcttaa tcttgataat 2580
gctgaagtaa caggtcaggc aaaacaatag gatgcagatg caggagatgc tgacacccag 2640
cgggaggcgc tgcagcaggg gcagctggaa gtggttgtac cacgtgatgc tgggactcca 2700
ctcactccag atgccaggga agctctggga caagaccctc acacgtgccc tatagcgcac 2760
ccctgatgtt agggtgttga ctgggaagct cagcttgggt tccgtgtagg tcacattata 2820
gactttgaat tccgccgggt tgtcctctct ggagatgttg accatgcaga tgaggccttt 2880
gtgcaggaag ttgttcgatg ggtatgggtt gctccacatc agcagcaggc cattggagac 2940
attggtgtgg agtgtgaggt tgtctggagc tgggggcttc acattgtcac taggcttgaa 3000
ggagccttgc cacagctgtc cccgctcaga ccacagttcc agccagtatg tgtctgcctg 3060
gatcggctcc tctatggcca tttggcacac acacacggtg tcggcactgt tcttgggggt 3120
gcatgtgagg ttttcagaga actcgaagag cagcctgtag tccaggagga gctgagaact 3180
gcagtccaca gtgctatcca gctgccactc acacgtagaa gtgcggatgt agtcagagaa 3240
gcaggtgggg tcacccagga ccttgatgcc cccagagcca gtcacccata gcaaaatcag 3300
acagctcacg gaggacagga acttggtgca aagccgcccc attgcggaca caaaggtgcc 3360
tgggctatac agggagagac tggaatgcag ctcagtggca gcgtacctgg cccccagatc 3420
ctgggctccc tctccagcac ctgtgtgttc aggctccacg cgccgtgcgg ggctttcctg 3480
cgcgaaggac ctcgcccggt ttcctacgcc gcccggacgc 3520

<210> 44
<211> 390
<212> DNA
<213> Rattus norvegicus

<400> 44
gtgcactaag aatgacaaac ttgctgtgtg ccacaaagat cttgggtggc tggttggtgg 60
ccagtggtca ggttggcctc acactgctcc aagtagaaga gcagcagctg tcggtctgaa 120
ggccccagtc cccctgtccg ccccggcaca aggggctggg ctggtgtcca gttggccagg 180
tcatggtcta tgggacgaga cacctcctgc tccagtcgct caaactgttt cagctgctgc 240
agctccagtt ggccttttcc ctgtcgcacg atgttgccct tttccagcag ttccttctgg 300
gtcttctcaa attcctcctt cccctgcaga tgaacgtagt catagtcctc catccaaccc 360
ccttcactgt tctcatactg gccatccgga 390

<210> 45
<211> 383
<212> DNA
<213> Rattus norvegicus

<400> 45
tctagacttt aacaacaagc gtgatgaaca cccagagaaa tgcaggagtc ggactaagaa 60
catgatgtgg tacggtgtcc ttgggaccaa agaactgctt cacagaacct acaggaacct 120
ggaacaaaag gtcctgctgg agtgtgatgg gcgcccgatt cccctcccaa gtcttcaggg 180
aattgctgtc ctcaacattc ccagctatgc tggagggacc aacttctggg ggggcaccaa 240
ggaagatgat acttttgcag ctccatcatt cgatgataag attctggagg tggtcgctgt 300
gttcggcagc atgcagatgg ctgtgtctcg tgtaattaag ctacaacatc atcgaattgc 360
ccagtgtcgc acagtgaaga tct 383

<210> 46
<211> 2870
<212> DNA
<213> Rattus norvegicus

<400> 46

```
ttttttttt ttttttttaa ccaagaggag gaatataatt gtgataggaa actaagaatc  60
atgaagctca ctacaaaaga caaacactac tgaaacatgt tgtgctggcc ttgacacacg 120
caggcagact gtcgcctagc tctgaggcag agggtcaagg ttgacacagg gctcggagga 180
aatatttacc agagagaatg tggtgattca tttatcagtc cagagatcgc aagtataaaa 240
cttcaagata taagaaggat caaattatat catgtatgtg attcaattta aaatgtctta 300
gccctcttac attatattat ctggattata actgtaaaaa aaatcaaatt acattcatat 360
gaaacttta tcaaaagaaa tcaaatccat ttttatgaaa ctttatagta caattatttt 420
tagttggtct ttccttaggt cacagtattt ataattccat ttacatctgt ataattttta 480
aaattaaaaa acaaaagcaa atcaatagaa atctaagttt tcttttgtaa aactctcttc 540
agtctccagg ccggcaccac atgacagtgt tgacttgtcc tccagacatg gacaactccc 600
aggatccctg gcttacgaac cattcaggcc tcgactcatt aggaatgctt tttggtttgg 660
ctcacgttgc aagaaattct ggagcatgtc catgccgtcc agggaccccc caggcttcag 720
gattaagttt ctgtatttca ttccaacctc tggattcatg atcccctctt ttttaaaaca 780
gctgtgaaac atgtccatgg aaaacacttc actccaaaga tatccataat attggccatc 840
ataccctcct gccaagtgtc caaaagtagc tggcatattt gtgcctggcg tagctgcaac 900
tcccagaatt tctgtgcagt atttagcgta ttcgctcgcg gcatccagag tcgcattggt 960
atggagagat tggtcaactt tgctcaaaac aatttggcgc agcgtcagaa gacctgtgtt 1020
gaccagccta gaagcaacaa gcttctcgag cagctcgtct gtgatagggt gtccatcttt 1080
ataatgcttt gacagttttc gcagggaatc aacgtcccac acccagtttt caagcatttg 1140
tgatggcacc tctacaaagt cagtttccac gtttgttcca ctgaatcgtg caaagtcagt 1200
ctgcgcacag atctgatgca tgacgtgacc gaactcgtgg aagtaagtcc gcacttcatc 1260
atgtctcagg agagagggcc gacctgctac aggctgagag aagttgacca ccagggcggc 1320
cacagacatc atccgactgc catcagggag aaggcagcct ggctggagac cgaagcaggc 1380
tgcatggttg tattttcctt cccttggata gaggtccagg tagaactgcc ccaggacctc 1440
tcctgtagct ttatccttca cagtgtaaag tgaaacgctc ttattccaaa catgagcatc 1500
gggcacttgt tcaaatgaaa gtcccagcag ctcctggtag atgcttagca agccttccgt 1560
gaccacctca atggggaagt actccttaag ggactcctgg tccaccgagt acttgagctc 1620
ctctgtctgt gtcatgtagt aatggaggtc ccatgcattg atcttcccgt cgtattcaaa 1680
acctcgctct tcacattcct tcttcttcag gctcaaaata aactcccgtt ctgcctcacc 1740
caagggtttc aatttctggc ttaaatcatc tagaaaggcg gccacgcggc tggtgctctt 1800
cgcagtgttc agttcaagga caaagtcagc atgggtgtta tagcccagca gcttggccac 1860
ttgagctcgc agcgggagga gctgttgcag aattgcggtg ttttcctgtt tgcacctggt 1920
atgaaaagcc atttccatct tccttcgagt ttcagggaca cagcatttct tcatgacagg 1980
gaagtagtga ggatacttta aggtaacttt gtacttgtct tcatctgttt tttctaaact 2040
gtcaatgaag tcatcaggaa gagcaccaag ttcagccttg gagaatacaa gggaagtgtc 2100
gtcctcattg aggttcttgt tgaagtcaat gcatagctca ctcattctct tcttcattga 2160
tttgatttca tttcttatgt gttctgaaag atggagtcca ttccttttc ccattttaat 2220
tgacttttcc aagtatcgcc tggcttcagg ctttatcttc tccaaatcgc atgtttcttg 2280
taaatgaaca attctctgaa acacatcttc tctcatgctc atctcaatat caaaacgaga 2340
aagctttttg tctgcttctg tgcttgcagc ccgcacttct ctgtcagatg acacgtgctg 2400
agggaagtcc agcatggtcc tttccactat gtacgtcact tctatgtcag ccagcacctg 2460
cagacagttc tcataagtta cttctttcag ggcgattgtc cccacggtgt cgtacacctg 2520
cttggtctgt gctatgagct gctctgtcct cgtcttgatc tgctctggag aaaggtccca 2580
tctgagaaca ttcctgccag ccgcagtgta ggaagacata gcttgaagag gagaagccag 2640
ctcctttccc agtgtcattg tcagctgaag cctggagcca ccagctctgt ggaggcctcg 2700
cagagtcgaa aggcacaggg tgatcatggg cacgccggga ggccggcagc agctggcgcg 2760
tcgtcctccc gcttgtaggt gcaggaggca ggcggtggtg tctgcgggcc cggaagccag 2820
gagtgggcca agccgaggag accagatctc gagacggagg ccgtcagtcc            2870
```

<210> 47
<211> 5127
<212> DNA
<213> Rattus norvegicus

<400> 47

```
ttttttttt tttgtttata tgccaacata taccttgtgc tagaaatact ttatggggtt  60
acaactcttt atatacaatt ttttttgagg cagtatctct gatggagagc ataacttgta 120
aagagcttgt gtgtgcttcc gtgctccaaa atgataggaa atccactttg agaagacaac 180
ttatttgatt ttaaaaaaac aaaaacaaaa acaaaaacag aaacaaaacc gcaccaatgc 240
acagccagag gctccgctgg aactgatata gaaccgcgca aacgccgtga ttataagtaa 300
cattttccag ggtggtcaag gctaacgtac aatattatac acctggcact gatgtttgcc 360
attggtcagc aactggcaaa atttgtttct atgtataaat ttatttttaa acattatctc 420
tggcctgaca tatcttcact atttataaaa acatttagac agtgagctca cgttgaataa 480
```

ctaggtctac tgtgttctgg aagctcttca gtagtaaaac agctttttcg tgttccatat 540
gcacaaaact gtgtccattt gcctgaagga ttttatcccc gggctgtaga aggttggatg 600
ctggtccatc aggctgaacc ctagtaacaa agataccctt gtcggaaggt ttgaaaggat 660
ttccttgccc actaattcca ccgctgatac taaatccaag cccagggttc ttttctattc 720
tcacacagaa ctgctcggga taaccgtcca tactcctctg ccctttcgtt tgaattaagc 780
accgtccagg ctggggtccc cgggtggcct gtgatgaggg gatctggatg ggcagtggcg 840
actggaactg ctgaatggtc actttgttga tgttcccttc atatggctgc tgctcccggc 900
tgcggtgctg aaggctctgt gaccccatca gggtctgaat gtggctgcct gccttttag 960
taatggtgtc cggaggtaca tcccgcctcc caagtgggta aggattccat tggccactag 1020
gagagacatc ttcttgtcca ttgtctaaaa tgttgctttg ctgggacggg gtcctgtcta 1080
accttctagc ttctatatgt ctaagcagct gctgtctcca gtctgccggc attttgccac 1140
agctctcctc tcccttcaca ggggtgggcc ttgtctttat atcactgtta tctgatgtct 1200
tgtcaccata gttacccaag ttatagtcag atggtatttt ttccaggagg gctgccatgg 1260
taggcctagc tgaaactggc ctggtttggg aggccccgta actctctgtg ctgtagctcc 1320
tggcagacag tggcctcctc tgggtaaggt ttttagcagg aaaacttccc gcctgcgctt 1380
tcacttcttg atatgaaggg tgctcatctt cgtacctgcc attcctcttg aggaattggg 1440
gatcagtcat tgaaacgctg ctctggcctt ccagccctcc cctataggct gctcggccat 1500
acctgtcacc agggggcagc tcgtggggct cactgaccct tctgaacatg gccatctctg 1560
tggagctggc cagggagtca gccctcctta ggaagcctgc cctgggcccc tggctggcga 1620
actgagcatt caccatggca tcctcattta cagatggttg ggaaaaggag aacatctgct 1680
ccatgggtgg gtatcctcta taggctctgg ggctgacgag atccttggcg atgtttttac 1740
cgggctgttg tacatactca gaattgtgtg caaaaggggg tgggatcctc ttctctgctt 1800
ttacttccac cgctccttgt ggattgaagc tttggtcaaa ctgatagacc ttcttagtca 1860
tagatgcttt ttgttggggt gggcctttac tacttccgta catgagcatt tcgtcatcca 1920
gcatgggtac cgactggctc ctggacatac tggacatgcc gtgctctggt cccaagaact 1980
tgtctggccg ctcgtggctt cctaagtgat cgcttccaga ggcatagttt tccagtggaa 2040
tgttatagac cttgtaggta ccgacgtcaa tctcatcaat actctgggac tttttgaact 2100
tgttggactt tatatctttc atgagcgggg aaagcctctc cgtgcttttg ctaattgcaa 2160
taacaccttt agacgaatct gggcggcagt ggatttgaga aaagacatta ccgagactcc 2220
ggttgggggt ggggtcgtgg tactcccatg gcactcccgg agaaaaggga cctggtgtct 2280
ctgtaggctc cttcatgtgg tcttttcttt caggcaaggg actggtagta ggggttgttt 2340
ctaatttgga gggaaaagca gtcctgtcct caaatggact gggggttctg gtccaattct 2400
gccagggatt ggaaggaggc acttctgttt ctggtgtgtg tctgtgggtg gactgctcca 2460
gttccagggg aacaccgaca atcctttctt gcctgattaa aggcctgcgc ccatgagcag 2520
gtacgcttct agccttggag cttaagagag ggttattgtt ggcattctcg cctgtggctt 2580
cctcggagac aaaacctgtg ttatcgtaat gggagccatc ggtccagttg tcagggaaag 2640
catcactcat tggcagccga tcaggacgct gggggaggtt ccctggaggg acagcctccc 2700
gttgggtgag taatggcttt gcatctagag gctgtgggaa aggtggtgca atcctgttac 2760
cccacaaaga gttatgcacg gcatctttag ttgttggctg caaggacccc actttcaccc 2820
gggtgttgga ggatgctgag gaagcctggg agggcgagta gtctgagtag gtgcctgagg 2880
agacactgtt attcagacag tgagttttgt caacttcaga ctcatcagtt gattcttttt 2940
tgtccttccc tagcagaaca agtttgggtg ggtacagagg ggtctcagct aatgaagggt 3000
gaagttcccc aatcctcatt tcattagctg gatgaacaaa agaatcctcc actgtaatct 3060
cctttggggc caccggccac ttgtgttcaa acttttcttt cacagtttgc tccgtgttag 3120
ctgttgggtt tgcgttctca acgcgcactc catggcttgg cttacccacc agattttgaa 3180
cagattttac catgttcttt aaatcctccg ggtaaggagt tggatatcgt tttaggttta 3240
tttcaacctg tctgccactt agagagggaa gagtggtgga ttgggctgcc actggtaatg 3300
gagcacacat gctcctctcc tgctggaggc cacttataca accccatgcc agctgggggt 3360
cactctgggg gacgggcata tcttggatct gctgatcaca cctggcccat ggtgtgcagc 3420
aatcgccaga cagcctggca ggttggagag taatcccacg ctggcccctg tcccaggggg 3480
cttggcagga gagagcctta actttcccag cactttcgtc atcttctttt ttatcctcaa 3540
attcaaaggc aacagtcatg cgctgttgtc tctgctcctc ccacagggtg gggttgaagc 3600
tgtcgctgtc tgactggaaa tcttcatcac cacggggctg ctggggaaac atgtagttgg 3660
tcagtaccct ttgcttggtt tctggatggg cttctgtttg cagagggatg agggccttgg 3720
actgattgtc agaaagccac aatgctgcaa gctctttgag tttggtgaag gagaatggca 3780
agttcttcaa cctattatca cttagattta agactcgaag tctctgcatc tgcccgattt 3840
cttcaggaag aaattctagc ttattggagc gtagagacat aacggtgacg ttcttacagc 3900
ttccaatttc tctgggcaac tctgggagga aattctcgtc cacagctaag gttcgcaggc 3960
tgtgcaggta accaatggtg ggagggaggg actccagctc attgcaactg cagtcgaatt 4020
cttctaataa agataagttt ccgattgtgt tgggtagcat tgtaagctga ttgtcatcta 4080
cttttagagt tgttaacttt ttcagcaatc ctatagagtc cggcagctgt tgcaacatat 4140
tggatgatag taagaggtcc tcgagggctt cacatccaga aatatccatg tcaaccgttt 4200
ctatcctgtt ttttgacata tccaggtata ccaacatctt taacttccct atagacccag 4260

gcagcacttg caatgcgttg ttatccatcc acagctccct caaattctga atttgatcca 4320
gaacttcagg cagctcgctg aattcattat tgcctaggtc aagtctttcc agctgggcca 4380
gcttgtgcat tgactttggt agagttttca agtgattttc tcttaactcc aagattcgca 4440
atttgacaag tcttccaaaa ttagctggaa gaaattcgag gaaggcgtca ttcaggtaga 4500
gctgggtcag gttaagaagc tgcgtgaagc catcgggtag tttagaaatg ggattgacac 4560
tggcttcaat aatggttaaa cacttacagc actttatgtt ttctggaaat tcttgtacac 4620
cgtttttact gatgtcgagt tctttcagat taactaggct agcaatggag gtcggcagac 4680
ttgagaggtc attatcagga atgcttagtt tccttagagc ttgacagttg aacaattgct 4740
tgggtagctc ctcaatctga ttggcatcta gatagagctc ttctagtgta cgttcgaagt 4800
tgaagacctc cttgggtacc tgttgcaggc tgcagtggga gtaatccaac accgagatga 4860
tctcttcctc gccacggaag cagcggcatg gcaccaggcg gccgatgagc ttccgtttgg 4920
tggtcatctc caggcactgc attgctagtc actcctgtct ctgaagactt ctaggctgtg 4980
ggcactttga cttgcattct tttcatgtag cgggctcact cttcttcagg cctcttccga 5040
agtgctgcac gggcctcctt acaaggactt ctctgatatt gtgggggatt ccttccccgt 5100
attaggttct ccatcatcgc agaagca 5127

<210> 48
<211> 1768
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<222> (893)..(893)
<223> Wherein n may be a, c, g or t

<400> 48
tttttttttt tttttttttt actagtaagg tatttactag gaaatgatac aaacagccag 60
gaaaagggtg catcgcagaa cagggtctgt gcgtataaga tgggtatttc ccctttgtca 120
cgtcattttt tccatgaaga tgcgcttaag ataggaaggg taaagtaccg acacgtggca 180
ggccccgggt ttagggaagg gaacgtgaga gagacgtcaa tggaggccca caacagtgaa 240
acccctggaa gagggccaga gcagtcccct ggtgcagtac tcagcgaatg cgcatacaca 300
actggaaagg ccttggcaaa ttgcccagcc ctgagctgag cggggtcagg tcgatgtcct 360
caggctccac cagcggatgc aacgtgaagt tctggagaat ggaggtgagg tatatgaaca 420
gctccatgcg tgccagtggc tctcccagac acagtcggcg tcccgccgaa aatggcatga 480
aggcggggct cttcttgaag gattgattgg catccagaaa atgctcagga ttgaactcct 540
gaggggtctt gaattggtcg gagtcatagt gcacggtgtt aaggagcgtg atgacatctg 600
tgcccttggg tatcaggaag cccctgaaag gtgtgtcccg aatgacgcgg tggggcaggt 660
tcatggggat gacgtctgca aagcgctgca cttcgtggat caccgcgtct gtgtaaggca 720
tggatgcacg gtcctccagc gtgggcatcc gcgaacgtcc caccacacaa tcaatctctt 780
cctgcacacg ggcttgcact ttggggtact tcataagaat gaggaaggca tggcgtaaag 840
tggtgcccac agtctccgtt ccaccaaaga gcaggttgtg tgtggtcatc agnagggtgt 900
ccatattgaa gtggctcagt gggtcttgct tctcctgtac cattttgtg aggaagcagt 960
cgatgaagtc ccggggagag ttggggtcca gggagtcctg gtgctcgcgg acgctgcggg 1020
cgatgagatc tttcatgccc ccaaagttcc ggaacacgcg tctgtgcggc ccaggcaccc 1080
agtccaggag actcgggaag atgttgtaca tctcgcccca ggggctgctc ataatctgga 1140
agttgtcatt gataaagtgg ataatggtga gcagccgttc atcgtcataa tcgaagcgac 1200
tgccgaagat gacagagcaa ataatgttgg agaccgagcg gctcaggata aacacggggt 1260
caaagggctt gccttccgtt ttccgcagca cgtccagcag gaagctgcct tcttccagga 1320
tccgctcctc gatgcttctt tttcccatgc caaagttcct caggatttgg acagagaacc 1380
ttcggaggat cttccagcgt tctccatcgg agaaggcgat gccgttgccc ttggtgaagt 1440
tgaaaaagat ggggtatgag cctcggccac tgaactcctc ccctttgtcc acaagagcct 1500
ccttcacagt ttgatatccg ctgaggacaa tcacacgcct gggccccagg tacaccgtga 1560
acactgaccc atagtccttg ctaagcttgg tgagtgaggt cagcaagtct tgggagcgaa 1620
gctgcagcag gtttcctagg attgggagag gcttgggtcc tggagggagc tggcccttgc 1680
cccatgaggt gaaggtcagg gacagagaga tgacagccag gaggagaagc aagatggctg 1740
tgctcacacc atccatagtg aaggcagc 1768

<210> 49
<211> 367
<212> DNA
<213> Rattus norvegicus

<400> 49
actatatgat cctgtttaca tgaaccatac atactaggca aacctgtaga catagaattc 60
agaccttata catagtccaa tagcatagat cacagagcat ggagacctga taaatgggga 120
ctgaggctgt tgggaagaag tgaggaatga ctcagcaacc ttgggcctgg tctccagcag 180
gtctcccaga atcagaaaaa tggggccatt ttgaacagaa gtgagtcggc tgactgcctc 240
agcacaatca gcgggctaca aagcaaatct tgtacactga gtctacaagc aacactctct 300
gctatggatt cctgctcatg ctcaagtacc ctcatgttgc agagaaagtc caaaaggaga 360
ttgatca 367

<210> 50
<211> 217
<212> DNA
<213> Rattus norvegicus

<400> 50
gccggctcaa aggtctctgc gagcgcattg gtgttttcaa tgacaatctt gcgtgccaag 60
tcttctccca aaaaggcgaa ttcatccagc atttcattgg tggttctgaa atgcgctttt 120
ggcagtggcg ctggctgggc atcttctccg tgcccaatgg tccggttgat catagcccct 180
tgaccgagac tacggacaat gatctcccga tagatct 217

<210> 51
<211> 1034
<212> DNA
<213> Rattus norvegicus

<400> 51
gaacacagac aaggatgtat gtgtgggttc agcagcccac agcatttctg ctcctgggac 60
tctcacttgg agttacagtg aagctcaact gtgttaaaga tacctacccc agtggtcaca 120
agtgctgtcg tgagtgccag ccaggccatg gtatggtgag ccgctgtgat cacaccaggg 180
acactgtatg tcatccatgt gagcctggct tctacaatga ggctgtcaat tacgacacct 240
gcaagcagtg tacacagtgc aaccaccgaa gtggaagtga actcaagcag aactgcacac 300
ctactgagga tactgtctgc cagtgtagac caggcaccca accccggcaa gacagcagcc 360
acaagcttgg agttgactgt gttccctgcc cccctggcca cttttctcca ggcagcaacc 420
aagcctgcaa gccctggacc aattgtacct tatctggaaa gcagatccgc cacccagcca 480
gtaacagctt ggacacagtc tgtgaagaca gaagcctcct ggccacactg ctctgggaga 540
cccagcgcac tacattcagg ccaaccactg tcccgtccac cacagtctgg cccaggactt 600
ctcagttgcc ctctacaccc accttggtgg ctcctgaggg ccctgcattt gctgttatcc 660
taggcctagg cctgggcttg ctggctccct tgactgtcct gctagccttg tacctgctcc 720
gaaaggcttg gagatcgccc aacactccca aaccttgttg gggaaacagc ttcaggaccc 780
ctatccagga ggagcagacc gacacacact ttactctagc caagatctga gcaataccac 840
aggagtggat tttatggggc acagacagcc catatcctga tgcctgcctg ccagggccct 900
ccacaccgtt ctaggcgctg ggctggctgt gcactctccc atgtatgctg tgcatactac 960
ctgcctggtg gcactcctaa taaacatgct cgcagctgtg agtctgtcac tggccctaaa 1020
aaaaaaaaaa aaaa 1034

<210> 52
<211> 528
<212> DNA
<213> Rattus norvegicus

<400> 52
ttttttttttt ttttttttcc ggggtcaaga tatttactcg atgctttcag gtttgaattc 60
aggggctcag caaggggggag gggcagggaa gggacacaca gggcatcttc caatcactgt 120
gacttctggc aggtctcgat gtcttcattg ccagtggtga ctgatcagtt gggacatggg 180
gagaagtcct gtgccctcca cgtctccatt gaaatcttct tctgatattt atgcacatca 240
ttgctccggt ccccgtcaaa gtttccacag gccccacaca acatggccgc ataatgctca 300
tcaaccatca cattcagatg cccatccttt ccaagccaca cctggactcc ggccttctgg 360
tggacaaaca tggatccgtc tgagatcttc ctcacagaca cagatgttaa cacagtagct 420
gggagatcca actcggagac cattcaccca tgcacccttg cttgggatca cagtcaccat 480
gccatcctgg aagaagatgt ggaccttgct cacgatcttg tcattgtt 528

<210> 53
<211> 4743

<212> DNA
<213> Rattus norvegicus

<400> 53
```
ttttttttt ttttttttgt tggtttggtt tgtttttgga gacagggttt ctctgtgtag  60
tcctggctac cctggaacta actctgtaga tgagactggc ctctgactca agagatctgc 120
ctatttctgt gaggattcaa agtgttcatc gcaatgcccg gcttagaaaa tgagtcttga 180
aatggcactc agaagggtgg atgtggcctt ttgaacgggc aagtaacaca ggtaaaatga 240
aaacacaaca ggtgcagaag cctgatcaac actcaccgcc cagacacctt tcaaacaagg 300
agctaagtca atgaggtaga accccaaatc ctccacctag gcgctgacag gcttaaagac 360
cccattgccc cacacagccc tccctccttt gtaaggtcac tgagggtaca ggacctgggc 420
agagacccag agcaaacaga aatgaaagaa caggctttgt accctgaaga gaggaacagg 480
aggttttcaa ctcaaggtaa ctggatggca gcatttgccg gcttcgagtg ctgagtggac 540
acacgtgcag aaatgacgtg agatgacacg cttagtaaaa cgatgataca ctttactcgc 600
acaacctgaa cctctactaa aacccagcca gccacaagct gtttgctatc ctttattaag 660
aggtcccaca ttcttgcggg actccagcca aaccagacag gtcccctaaa tatagcagga 720
ggcctggagg ggaagggaat gacttaggat cccaccacac caccctggaa acagaactcc 780
accacagaca gacggacaga cggacggaca agagccgggg aggagaaccc acctcactct 840
tggttctctc cccgttgcat ccactcaaaa agaaagtcaa acactggcta tgcagacccc 900
agcccaccca cccacccata gcagcgtttg tgggactccc ccctgaaacg ggtagcccca 960
agacaacttc ctatggttct tccctgactt tggtttgctc ctggcaactc cgcgccctct 1020
tccttccctc agcctccagc tctctctcag catcttctac cacctactcg gaccttccct 1080
ctctcttgct ctctgctttc tggtctccct gccacgggct tcttggggaa gcagcgggca 1140
cctttctcct agcaagggcc ccactaggcc ctgtctgccc agcgtgggac tcacacagcc 1200
gccccactct ctttgaggtc aggggctgag cgctgccttc gcattcgtgg aggggtagtg 1260
tatggtgggt agcggggccc tggccgctgg gctgggtaag gttggggctg ttggggataa 1320
gagttgtgct tctggggccg taagtgctgg ggttctggct gtgtagaacc ccctccccga 1380
gatcggctcc ctccatctag ggaattcctg cgaggacggt ggggccttcg gggacttgga 1440
ggtctgcggt taggggggagg agggggtgca gtgacctctt caggggggttg gggacctggg 1500
gcctcaccac tccccattcc tggccaggac tccctgtgct gagggttgct cttgaagggg 1560
aagcgcagct tgcaatcatg cgggggtaca aagcgagctg ggggcctgcg tagtccccca 1620
ccccggcccc cggagccctg cagtccctgc agccgcagct gctcctgctt gagccagcga 1680
aggcgaccgc gacggaaggc agggtcctct tccatcagtc ttgacacacg ctcccagctg 1740
gactggggtg gtgaggaggg ccggacagct ggtgagtggt cattggacac tgcctcctct 1800
actgcctctg acccttcggg tggggcccag gtgaccaaac cagattcttc attatcatcc 1860
tcaagatcct gggtcaacgg gataaccctc tccatgcgga gcatccggtc ccgcagggcc 1920
tgcagctccc ggtccttgct gctgttttgc agcttcactt cctgcagaat tcctgtcagc 1980
ttgtcaatat gagcccggag gtcttctacc tctgccccac gggctccttc ctcaccacca 2040
cctccaccac ctccacatcc ttcttcttca cccacagtat cccagacatc cctggccaca 2100
gctctccagg cgtctccagg accctcaggc ttgccgtagg tccggcacag ctccctcatc 2160
ttgagagcag ccagagcttc aatctctgcc cgtccgtgac ggaagtcggc cagggccacc 2220
tcatagcaga tctccttcac tgcttgcatc ttcaggtcag ccatggtggc ccaccggggg 2280
tctttgccct ggagccgccg tcgctgaggg atctggtaaa ctcttcgagg ggccctgcgc 2340
ttcccactgc tgggcaggcc acagcgcttg acgatggtct ggactgtgtt agggggcagc 2400
tcgtcccgca aggaggaaat cagccgccag ctttcttcac aagagcgctt gtcagagtct 2460
tccccactgt cagaatctgc atacagccgc tgctgctcca gcaaaaggtc agcctcttcc 2520
ttttctttcc ggtactgatt ctccaagtct tgtagcctct tctccatctc tagcttgatg 2580
tctatgcctt gctgctccag ccagtccttc tgagcaaagt tccagtccac aggctcagag 2640
ggaggtcctg ggggtggggg gacccctcgc tctcgttcca gccgtgcttg ctccgggtga 2700
ttgaagcgga acacatggtt cttgcccatt acaatcctgt tgcctgactt cagcaccagc 2760
ggctccgtca caagcttccc attgacatat gtctcagctc cttcacaagg ttccaatgtg 2820
accatcactt ctccatcagg ctgagggatg ctgcggaaga ggcagtgctg ctcccggatg 2880
aactggccag tcaacttgat gtccacatct acctggccaa ccctggtgac gccatctttg 2940
atgtggtaga gaaggcattc agacatcaag gggtcctcat tcagatttac caggtgggga 3000
gtctttttg gagagaagac acccacagta cgccatcctc ccggagagcc catctcagcc 3060
agcaatgctt ctctctccat cctcagagct tctgtcttac ggagcttctc ctcccaagtc 3120
tcattcagct cagctataat tttctctgtt tcctgcagcc tctccatggc ctcctcaggc 3180
ccaatctggg gctcagcact gggtgaaaat gacggctcca gctcgccgtt atgtggagga 3240
ggagatgagg gtgaagctgg ggcaggggga gatgatgcag caggcagaac acctccagga 3300
ctccctctt ccacctttag acctcctaga gcagaggctg aaagcccctg agccatcagc 3360
agttcccgca accgggccac ctcctcctgc agctcccgga taagccgggc attggggtcc 3420
tcattgatga cagcattgca tcggatctgt ttggtgcggt ctgcgtacct gagagtgctg 3480
agtgtctcct cgtaattgat gtcagcggga ctcagggctg caatcattgc tgtgcgtgag 3540
```

ttcccaccca aattctcctt gagtagccag gtaagcacag agtctctgta agggatgaag 3600
tccgacttcc gcttctttga ttgcaaatct gccagggctg agatcacctt ccctagagta 3660
gtcagggact tattgatgtt tgcaccttcc ttcagacgca tgccccgagc ccctgaggag 3720
tcggcccgct cgctcccggc aaggttcacc aagctgatct tactgacctt ttctgaatcc 3780
agtccagtaa gctggtcatg ggagcgctgg gtaaagacga tagtaaagac agcgtgggag 3840
cggctgctgg tttcgttcat gttggtggca gccacagttc ttgccttatt tccacagtcc 3900
atgaggtcag caatgtctgc ataggaagtc acagccaact tagacaggtc ttgtacatat 3960
gggcccagga tggggtgctc ccggacccgc agagagcccc gactcttggg gttcaagagg 4020
tctcgtactc gttcgcaata gatctccata tagctcacct ccacagagta ggaaagttga 4080
gcactctggt tcacattaac tcgagagaag aggtcctcgc agagctgagg tacaatgccc 4140
tgctgccccg gttcctgccg ccccatcatg gtgtaggact tgccagcccc cgtctgaccg 4200
taagcaaaga tgcacacgtt gtagccttca aaggcatgca gcagcatctc ctctcctatg 4260
tctcgataca cctgctgttg agatgcaaac tgtgggtcct ccaccgaagt atgtgaccag 4320
taagaatagt cgaatgaagc ttttaaaaac atcctgctct gtttgggatt aatgatggag 4380
gtggtgttgc cctgcatgct gaccacacac ttggcatcct ggctggtctc acgggcatta 4440
aagggccgaa ccctcactgc cactttcacg gaggcaccag ccatagcttc agaatctcct 4500
gccctcctca gctggtgtcc tggccccaga tcagcggggc tgtatcagtt ctggctgcca 4560
ccggccctcg tatgggaagc cccatcctac acttggggcc tggccacacc agcaaggctc 4620
ctcgcggcag actcccggca gagagcaaag ggacaatact ttgctggcga gtagtgctat 4680
gaactctgcg ctaccggtgt aagagacgca tcggggccag ttcggggctg cccccgcccc 4740
tcg 4743

<210> 54
<211> 2136
<212> DNA
<213> Rattus norvegicus

<400> 54
atgggaaaaa aagataaccc agggtgtgag cattctcgtg ccgaattcgg cacgagcagc 60
attcgggaaa ggcaaacagt ggctctgaag cggatgttga atttcaatgt gcctcatgtt 120
aaaaacagtc ctggagaacc cgtatggaag gtactcatct atgacagatt tggccaagat 180
atcatctctc ctctgctgtc tgtgaaggag ctgagagaca tgggcatcac cctgcatctc 240
cttttgcact cagaccgaga tccaattcga gatgttcctg cggtgtactt tgtgatgcca 300
accgaagaaa atattgacag actgtgccag gatcttcgaa atcagctcta tgaatcctat 360
tatttaaatt ttatttctgc gatttcaaga agtaaactgg aagacattgc aaatgcagca 420
ttggccgcta atgcagtcac acaggttgcc aaggtttttg accagtatct caattttatt 480
actttggaag aggacatgtt tgtattatgt aatcaaaata aggaacttgt ttcatatcgg 540
gccattaata ggccagatat cacagacaca gagatggaga ctgttatgga cactattgtt 600
gacagcctct tctgcttttt tgttacatta ggtgctgttc ccatcatccg atgctcaaga 660
ggaacggcag cagaaatggt ggcagtgaaa ctagataaaa aactgcggga gaatctaaga 720
gatgcaagaa acagcctttt tactggtgat ccacttggga ctggccagtt cagcttccaa 780
aggcccttat tagtccttgt ggacagaaac attgacttgg caacgcctct gcaccatacg 840
tggacatacc aagcgctggt acacgatgtc ctggatttcc acttaaacag agtaaatttg 900
gaagaatcta caggagtgga aaattctcca actggtgcta gaccaaagag gaaaaacaag 960
aagtcttacg atttaactcc agttgataaa ttttggcaga aacataaagg aagtccattc 1020
ccagaagtcg cagaatcagt ccaacaagaa ctagaatctt acagagcaca agaagatgag 1080
gtcaaacgac tgaagagcat tatgggccta gaaggagagg acgaaggagc catcagcatg 1140
ctttctgata acactgctaa gctcacatca gctgtcagtt ctttgccaga actccttgaa 1200
aaaaaaagac ttatcgatct ccatacaaat gtcgccactg ctgttttaga acacataaag 1260
gcaagaaaac tggatgtata ttttgaatat gaagaaaaaa taatgagcaa gactactctg 1320
gataagtccc ttctcgacgt catatctgac cctgacgcag ggactccgga agacaaaatg 1380
aggctgtttc ttatctacta cataagcgct cagcaggcac catctgaggt tgatttggag 1440
cagtataaaa aggctttaac agatgcagga tgcaacctta gccctttaca gtatatcaaa 1500
cagtggaagg cttttgccaa gatggcctca actcctgcca gctacggaaa cactaccact 1560
aaaccaatgg gtctcttgtc ccgagtcatg aatacaggat cccagtttgt gatggaaggc 1620
gtcaagaacc tggtattgaa gcagcagaat ctacctgtta ctcggatttt agacaatctc 1680
atggagatga agtcaaaccc cgagactgat gattacagat attttgatcc caaaatgctg 1740
cggagcaatg acagctcagt tcctaggaac aaaagtccat tccaagaggc cattgtcttt 1800
gtggtaggag gaggcaacta tattgagtat cagaatcttg ttgactacat aaagggaaag 1860
caaggcaagc atattttgta tggctgcagt gagattttta atgctacaca gttcataaaa 1920
cagctgtcac agcttggaca aaagtaacac agaagagtca taatgggtga tcagtgtgga 1980
cagatgtaaa aagccagacg tgtccttctc catagcagtg ccctaacagt gcaacctgcg 2040
gaatcagtca tttttaaaga aattctatac ttcatatact gtacaatgat taaaataata 2100

aaccatttca gaagtaaaaa aaaaaaaaaa aaaccc 2136

<210> 55
<211> 1739
<212> DNA
<213> Rattus norvegicus

<400> 55
ctcaggtttc tcacactcct ggtaatactg taaaacttta ccatggacca cagttccaag 60
gactcctgaa cacagtcttg gagttaagcc tgtgaacagc ccacgcttcc catcgatgcg 120
taacaagcga tggattccat atctctgcgt gtagcactaa atgatggtaa cttcattcct 180
gtactggggt ttggaaccac tgtgcctgag aaggttgcta aggatgaagt tatcaaggct 240
actaaaatag ctatagataa tggattccgc cattttgact ctgcttattt gtacgaagta 300
gaagaggaag tgggccaagc cattagaagc aagattgaag acggcactgt gaagagagaa 360
gatatattct atacttcaaa gctttggagc actttccata gaccagagct ggtccgaact 420
tgcttggaaa agacactgaa aagcactcaa ctggactatg tggatcttta tattattcat 480
ttcccaatgg ctttgcagcc tggagatata tttttcccac gagatgagca tggaaaacta 540
ttgtttgaaa cagtggatat ctgtgacaca tgggaggcca tggaaaagtg taaggatgca 600
ggattggcca agtctattgg ggtgtccaac tttaactgca ggcagctgga gaggattctg 660
aataagccag ggctcaaata caagcctgtg tgcaaccagg tggaatgtca cctttatctc 720
aaccagagca aaatgctgga ctattgtaag tcaaaagaca tcattctggt ttcctactgc 780
acgctgggaa gttcacgaga caaaacatgg gtggatcaga aaagtccagt tctcctagat 840
gatccagttc tttgtgccat agcaaagaag tacaagcaaa ccccagccct agttgccctt 900
cgctaccagc tgcagcgtgg ggttgtgccc ctgatcagga gtttcaacgc gaagcggatc 960
aaagagctaa cacaggtttt tgaattccag ttggcttcag aggacatgaa agccctggat 1020
ggcttgaaca gaaatttcag atacaacaat gcaaaatatt ttgatgacca tcccaatcat 1080
ccatttactg atgaatagta acatggtgga ctttgtcagc atttctatcg gaagatctgt 1140
ttatgcattg tgatttgaaa gatatcttgg atactggtga ctgaatgcat cagaccactg 1200
tttctgttaa ttcacagtca gctggagcaa tgtccacagt gctatgaggg aagccatgtt 1260
tttgtcacac tctgaaatgg aacatcacgt tgcttttcct tgtgttttta aatattcatt 1320
tattttgctt tccatatatg aatattttcc ctacatgtat gtgtatctca tgaatgtcta 1380
tgtccatgca gggttgaaga gtgttgcagg tcacttggaa ccggagttac attgattatg 1440
gagttaccat gtgggtgctg ggagccaaac ctaggtcttc tgtgagacta gcaagtgcct 1500
ttgaatgctg agccatctca ttaggtccaa ccctaaagat ccttgcctgc cactatttct 1560
gtgatctcaa tgttttgttt tctcctgact tctgacacca agctgatttg ctagaagtct 1620
tgggcatgaa gtgggtgttg aggacagtta ttgcaaaggg atttctgggt gggagttgaa 1680
agaacgttca acattcaggg aattaattgt tcgaggttat tgattagtca atattcccc 1739

<210> 56
<211> 336
<212> DNA
<213> Rattus norvegicus

<400> 56
gtgcacttgt ccgaggcacc tttgcagaca cagccctggg cacatttgga gcagcccacg 60
gggcagcagg agcagcagct cttcttgcag gaggtgcatt tgcagttctt gcagccgcag 120
gagctggagc aggtgcagga gccgccggtg gagcaggagc agttggggtc cattccgaga 180
tctggtgaat ctggagcaac ggtgtaagcg acaagaaggc agttttttttt ttttttttt 240
taaaataaac aggcttttat tttccacctg ctcggtacaa aacggggttt attaaactgg 300
gtggaggtgt acggcaagac tctgagttgg tccgga 336

<210> 57
<211> 1937
<212> DNA
<213> Rattus norvegicus

<400> 57
ttttttttt ttttttttcc aaaacaaatt cttttataag ttgtcttgtc atgttttgtc 60
acagcagaaa gaaaagccac taagacactt gctaatcccc cgttctgttt ttttttctca 120
aaaccccaag atatatatat atatatatat atttacactc attttacata tgcaaaaata 180
gaaccagact cttctcccta aagacttccc tgaaaaacct actcagaacc ctgcaagtac 240
ctgatttctg tttattgagc ttctcttcca gaatcaaggg aataaagaca aaggtttatt 300
tttcttcact ccaatgcctc caggaccaac ctggcatggt tttcattcca ggagctagca 360

aaataaggga tgaaagttta ggtatcttgc ctgctaattt cagtttccta agggtggaga 420
cagctccgtg taaatgccca gtaaacaggt acttgttgag ctaagtcatc aaaggaggag 480
cagtgcccca gaataaattg acagttaatg atgtcaagta tcttaatgtt tatttttatt 540
ctttacatcc agcacttgaa gaaaagaaaa tgacatagtg ttttagaaac atagtccttc 600
atgattataa ctcatcaata ccttagaaca cacaaggaca ctgtgagtta atgactacac 660
taaaaaataa tgggaaattc agcataatta acaaaaatcc aagaggaaat ttcaggacct 720
tgatcagaag ctttcactaa gtgctggcac tatatgctac ttcatttcac taagtgctgg 780
cgctatgtgc tacttcattt cactaagtac tggtgctatg tgctacttca ctgtagacca 840
agcttcaggg caggctaaga aatcttaacc ctctgaagac atgatctaag aaatggggac 900
caagcacttg tagagaattg gtagccatca agaagtccct agtaaggaca gctatggaag 960
gagctggcca cctttaacct gaacctgtct taaaattaca aagcccatgg agcagtactt 1020
ataaacacaa gcatggtgag gttttgccat tctataaata atcttcagga ttccagctgg 1080
ggctctcttt tggcatgaga agcttcaggt aaaccagcag acataggatg acctattatt 1140
gatggacctt ctcaaagtac tcttttgaag ctgttggact tggcttgatc gtaggggact 1200
ctggtgtcca gttgggtggg cagacttctc catgggtctc cacaaactgg aacgccttta 1260
ccaaacggag tggttcttcc acacttcggc ccaccggaag gtcattgaca ctcaggtgct 1320
tgatgacacc attagggtca ataatgaaga gacctctgag cgcaatgcca gcactttcca 1380
acagtactcc gtagtctcgg gatatctgct tagttaagtc cgacaacagc gtgatgttca 1440
tgtggcccaa accaccattc tttcttggcg tgttgatcca ggcaagatga ctgaagtggg 1500
aatccacaga aaccgcaact acttcacagt ttacgtcatg aaactcattg gctttgtcac 1560
tgaaagcaac aatttctgta ggacacacaa atgtgaaatc caaagggtag aagaaaagca 1620
ccaagtattt ccccttaaag tcgtcgagac tcagctcttt gaactctcca ttgacaacag 1680
cagtaccttt aaaatggggc gcatgctggg tgacagcagg ggtgtggaat gaagaactgg 1740
tgctaaaggc aaactttgct tggggacagg cagaccacag catgtctgtc aagcaggttc 1800
ttctagaagc aacaggccta agaactgttg aggcagaaat actccggaaa atagtgctcg 1860
caggccgagc caccgaggac cagagcaacc ttcccgcagc tgccgccatc ttcagagaac 1920
gcaagagcca cgatagc 1937

<210> 58
<211> 686
<212> DNA
<213> Rattus norvegicus

<400> 58
atgcccacat ttgtgaccag tacatgtttc tgcccaccat gttcgagact atcaaagtcc 60
agaggggtca tcaatccact tatcccaaat caaggtgcac caatcccatt tcaacgcctc 120
tgccagcccc ttatttccaa tgaacacaga caaagctggg ttaatcaagt caagtttttt 180
tattttattg tcagttacat gctttataga aaaaagtgtg gagaaccggt cagggttgta 240
caaaaaaaag gctaggttcc tacgttgttt tatttacacc attgtgagga cgcccccact 300
tcaggcgcag cagctgcact tgtccgaagc ctctttgcag atgcagccct gggagcactt 360
cgcacagccc acggggcagc aggaacagca gcttttcttg caggaggtgc atttgcattg 420
tttgcatttg caggagccag cgcaggagca ggatccatct gtggcacagg agcagttggg 480
gtccatggcg aatggaggcg gcagttggag atcaacgaga gatcgctgta gagttctagg 540
agcgtgatgg agagaagcac gcggagcgcg acctttatag cccagagtat tgggtcgcgc 600
gcaaaagctc cgcccgggtg gcggggcgcc acctgccctc ctccccactg cctgcacacg 660
cccttcttct ggctcaaggg aaatgg 686

<210> 59
<211> 1234
<212> DNA
<213> Rattus norvegicus

<400> 59
ttttttttt ttttttttag gaaaagcgac tgctttaatg aattagacaa aatttcacat 60
gaaatcagaa tcctataatc cttccttct gatcactaaa aaatgcaaga ttcattcgtt 120
acaagccatg tgcgattcgg acccctcgaa ggcagtgcag gtctgcggtc cagcctcagg 180
tgctgcacta tttcccattc tcagcgctga acattcgttc tgtgagcatc cgctccaact 240
ttatggcatc agcagcaaac ttgcggatcc catcagagag cttctccaca gccatttggt 300
cctcattgtg cagccaacgg aaggccttct cgtccagatg tatcttctcc aagtcactgg 360
tctgggctgc tttgacggaa agcgtgggtg ccagcttgct gctgtccttg agcagctccc 420
ccagaagctt gggtgagatg gtgaggaaat cacagcctgc cagcgctttg atctcacccg 480
tgttacggaa ggaagcaccc atgacaatgg tcttgtagcc aaacttttg tagtagttgt 540
agatttttgt gacactcttc accccagggt cctcctgggg ttcgtaggat ttcttgtctg 600

tgtttgccac atgccagtca aggatgcgcc ccacaaaggg agagatgagc gtcacgcccg 660
cttcagcgca ggccacggcc tgggcgaagg agaaaagcag tgtcatgttg cagtggatgc 720
catgctgctc ctccagctcc tttccggcct ggattccctc ccaggttgat gataacttga 780
tgagaattct gtccttgctg atcccagctt ctttgtaaag ctctatgatg cgcctggctc 840
gggccaccat ggcatcctta tcaaaggaaa gccttgcatc gacttctgtg gatacacggc 900
ctagaatctt ctttagtatt tctgccccaa acagcacaaa aagtttatca atggcatttt 960
taatctgctc ctcttgtggc ccacccagct tcttgccgta ggcaatggcc tcctccacca 1020
gctcttggta ggcaggcatc tgtgctgcag ccaggatcag ggatgggttg gtggtggcat 1080
cctggggctt gtactcatcg atggcgttga aatcacccgt gtcagccacc acggtggtga 1140
actgcttgag ctggtccaag gcggactcca tcctctggcg ctttaccggg gaccccgaca 1200
tggcgaaacg cgcacagctg aggcggtagc tggt 1234

<210> 60
<211> 2514
<212> DNA
<213> Rattus norvegicus

<400> 60
gcactctcca gcctctcacc gacttttttt tcaaggagac aattttattt ttttaccaag 60
gctgaattta taccataaca tgggtaacag agggaggggg gaagtgtgaa acatttacac 120
aggccaaggg cacagtatac atgtagtcag ctgatgtcaa caggatgttg gtttttcaga 180
aagcttacag gtcatcacat tgggtatctt gatgtcagat gtatttctca gcaaggtcag 240
aactttatca tatcattatt catcctgacc accagatttg tattagtctt ctgcagctgg 300
ctggggattt tccatgaacc cagtcatact taattctaac cataacatca ataatggagg 360
gtttcaaggg cattgctccc aacatgtaat tacaaaaaga aaaaagatga tatatttccc 420
aaaaagagag acacattcaa atttcctctc aaactcccca catctgaatc atgatgatgc 480
ttttaaattg gttctcttct taccaacatt ccaaccttcc cacaagaact tgctctccag 540
gttcttggag ctctggttct tgggctgttg gagagaaccc tgggtctctt ggtcactcct 600
gccacaggtg ccctacctca aaactaagaa aaagggaaaa tctatggagt actttcttct 660
tcctcaaaga atatggggaa tattgactaa tcaataacct cgaacaatta attccctgaa 720
tgttgaacgt tctttcaact cccacccaga aatccctttg caataactgt cctcaacacc 780
cacttcatgc ccaagacttc tagcaaatca gcttggtgtc agaagtcagg agaaaacaaa 840
acattgagat cacagaaata gtggcaggca aggatcttta gggttggacc taatgagatg 900
gctcagcatt caaaggcact tgctagtctc acagaagacc taggtttggc tcccagcacc 960
cacatggtaa ctccataatc aatgtaactc cggttccaag tgacctgcaa cactcttcaa 1020
ccctgcatgg acatagacat tcatgagata cacatacatg tagggaaaat attcatatat 1080
ggaaagcaaa ataaatgaat atttaaaaac acaaggaaaa gcaacgtgat gttccatttc 1140
agagtgtgac aaaaacatgg cttccctcat agcactgtgg acattgctcc agctgactgt 1200
gaattaacag aaacagtggt ctgatgcatt cagtcaccag tatccaagat atctttcaaa 1260
tcacaatgca taaacagatc ttccgataga aatgctgaca aagtccacca tgttactatt 1320
catcagtaaa tggatgattg ggatggtcat caaaatattt tgcattgttg tatctgaaat 1380
ttctgttcaa gccatccagg gctttcatgt cctctgaagc caactggaat tcaaaaacct 1440
gtgttagctc tttgatccgc ttcgcgttga aactcctgat caggggcaca accccacgct 1500
gcagctggta gcgaagggca actagggctg gggtttgctt gtacttcttt gctatggcac 1560
aaagaactgg atcatctagg agaactggac ttttctgatc cacccatgtt ttgtctcgtg 1620
aacttcccag cgtgcagtag gaaaccagaa tgatgtcttt tgacttacaa tagtccagca 1680
ttttgctctg gttgagataa aggtgacatt ccacctggtt gcacacaggc ttgtatttga 1740
gccctggctt attcagaatc ttctccagct gcctgcggtt aaagttggac accccgatgg 1800
acttggccaa tcctgcatcc ttacacttct ccatggcctc ccatgtgtca cagatatcca 1860
ctgtttcaaa caatagtttt ccatgctcat ctcgtgggaa aaatatatct ccaggctgca 1920
aagccattgg gaaatgaata atataaagat ccacatagtc cagttgagtg cttttcagtg 1980
tcttttccaa gcaagttcgg accagctctg gtctatggaa agtgctccaa agctttgaag 2040
tatagaatat atcttctctc ttcacagtgc cgtcttcaat cttgcttcta atggcttggc 2100
ccacttcctc ttctacttcg tacaaataag cagagtcaaa atggcggaat ccattatcta 2160
tagctatttt agtagccttg ataacttcat ccttagcaac cttctcaggc acagtggttc 2220
caaaccccag tacaggaatg aagttaccat catttagtgc tacacgcaga gatatggaat 2280
ccatcgcttg ttactcatgc aaccaagcag gtcttgggtc tggcgagggt cttctgactg 2340
ttctgagaca gccctgtgtg aggaatgcac tttcacaggg ttggaggtac ttccaagacg 2400
ccataggaac cacacgtggg tcacagctat cagttcactg tgggcaagaa acctctttat 2460
ggccacctgg taacaaaaat ttttctgtct gtgaattttt tcttactatt taaa 2514

<210> 61
<211> 1086

<212> DNA
<213> Rattus norvegicus

<400> 61
ttttttttt tttttttca cacagggttg cttttatttc cacatccaac ttgagcagag 60
gccctgccac aacctgaaca gctgtgaggt gctgggtgcc tccagagttt ctggcacagt 120
aagtgttggg tgtgcagact tcctgatggc cacatgacac tggcccacac aggaacagca 180
agtccatgaa tggaaatccc actgagctgg aagtggaggc tctggaaacc ccatgggcag 240
cagcaggagt taaaggagcc accaggaaca ctgcagtgag gctccaatgc agacagggct 300
gataaaaacc caaacagggc attgtgagag cagaggctcg agtgtccccg ctgaggaccc 360
ggggctgaag gcacagagct gtgtcgggat ggaagaaccc tgggtgcact cgcagtccag 420
agcacgaaag cacaggtgag aacccagccc gaggctctct gtgaagagtg tggccttgga 480
tcttgggcac ggcacagtga cacacagtgc tgaggtcact cctgacttcc cagaggaatg 540
acctcttcag tgacaaaaaa ctcaatggtc tcttcctccc agtcatccac gttgctgtcc 600
agctcgtcag tgtccacccc tccccgtagc tctagacgct cgttcttctg cttcatatag 660
agttcctggg ccatttttcg gtattgcctg aagtcctcca tcatggtccg ccttctttcc 720
accagttcct ttgaagcttt ggactggctc aagcgatcct tctgctcaaa gatcttagag 780
tatttcttca gatccttttt aatttgcttt atctgatcct gactgaggag tgttgggggc 840
cttggtctcc agagcagctg gcagaagcgg tccttgttgt tcttctggag aagacgacct 900
tggaaggtcc acagccaata agcattgtcc accttatggc tccaccacga cacagaggta 960
accacatagc ggccagttgg gtcccattcg acgtcggagg ccatgtagtg ctctgcaatg 1020
ttcatgacgg tgcagtctga agtgtcgaca aacgccaagg cgccattcat gctcctcagc 1080
ctcgtg 1086

<210> 62
<211> 1362
<212> DNA
<213> Rattus norvegicus

<400> 62
ccaaaccaac aaggcagcca caggccgtcg gtgcctgccg ccttccacca ggggcccgcc 60
aagacaacct tccaccatgg ctttgaagag aatccacaag gaactgaacg acctggcgca 120
ggatccccca gcacagtgtt cagcaggtcc tgtcggggaa gatatgttcc attggcaagc 180
tacaatcatg gggccaaatg acagtcccta ccagggtgga gcatttttct tgacaattga 240
tttcccaaca gagtacccct tcaaaccacc taaggttgaa tttacaacaa gaatttatca 300
tccaaatgtt aacagtaatg gcagcatttg tcttgatatt cttcggtcac agtggtctcc 360
agcactaact atttcaaaag tacttttgtc catcagttct ctgttgtgtg atcccaatcc 420
cgatgatccc ttagtgcctg agattgctca gatctacaaa acagatagag acaagtacaa 480
cagaacagct cgggaatgga ctcagaagta tgccatgtga ctaaagagat tattggatcc 540
tctgcgaata aaagctaggg gaactctgaa agagaaagtc cttttgattc ccacttgact 600
gtttgctgtg aacccacgat gtaccggcct cgtcctccct ggtgcacggt cttcatctga 660
tacagtactg ttgcatgttg cacgcaccaa aaatactgtg tttctgtacc aacactgtct 720
cctagcagac gagccttctc caggcataac ctaggtgtga gattaaaagt tttccttatt 780
gacttaaatc tggataacaa ggtgtgagtg agggtggtgg gtacaagata ctgctcagaa 840
ggggtaaagg tccccaacct ataagacaat gagatggctt ttcagtggaa gccatttaca 900
gctaaatgtt taaatgaatg aaaagctagg tgaagaacat gaatgttcct gtactcattt 960
tattccaaaa gacctagagc ttaaatgaac attaaagcca accagactaa gccaacccac 1020
ctcctgtatt ttaaagtcta attggtcaac aaaaatagat cggcactatc ggtccataaa 1080
gtgtgcctgg ctttgttccc aaatccttta tacacggatg actcaaccta ttttctttca 1140
cactttctct ccatattctt tggtttactt gcggtttctc agttgattca tcactaatag 1200
ctcttatttt tattatatta actgcttaat ctatttggat gtaaaggtag acattcaact 1260
tgatgaaaaa agcttgtgta tagagaccta attgctcctc ttggagcttg tacagtcaag 1320
aatgatgcat ctgtgtaata aaccaattat tctagccatt at 1362

<210> 63
<211> 796
<212> DNA
<213> Rattus norvegicus

<400> 63
tgtacactac ccctcacaaa ccacaagccg cagcaacatg gatgcccagt ctggagcagc 60
aacagccagg atgacctgga gccaggggg cttcggaaca gatgtgcacc cttcctgggt 120
gatgttttca gctttgtgag aaaccttact atcagaggag atggctagca atgttaccaa 180

caagacagat cctcgatcca tgaattcccg tgtattcatt gggaatctca acactctggt 240
ggtcaagaag tctgatgtgg aggccatctt ttcaaagtat ggcaaaattg tgggttgctc 300
tgtgcataag ggctttgcct ttgtccagta tgttaatgaa agaaatgccc gagctgctgt 360
agctggagag gatggcagaa tgattgctgg ccaggtttta gatattaacc tggctgcaga 420
gccaaaagtg aaccgaggaa aagcgggtgt gaaacgatct gcagcggaga tgtacggttc 480
ctcatttgac ttggactatg actttcaacg cgattattat gacaggatgt acagttaccc 540
agcacgtgtt cctcctcctc ctcccattgc tcgagctgtg gtgccttcca aacgccagcg 600
tgtgtcgggg aacacctcac gaaggggcaa aagtggattc aattcaaaga gtggacaacg 660
gggatcttct tccaaatctg gaaagttgaa aggtgatgac cttcaggcca ttaaaaagga 720
gctgactcag ataaaacaaa aagtggattc tctgctggaa agcctggaaa aaaaaaaaaa 780
aaaaacccct cgtgcc 796

<210> 64
<211> 716
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<222> (111)..(111)
<223> Wherein n may be a, c, g or t

<400> 64
ttttttttt ttttttttga ttttggccaa acttttatt tagtattttg tagttgttta 60
acacacactt aaatggtctt actcggggag ggggaaggga ggttcttgta nattcccaag 120
gaaaggtcag aaaagcaaaa tatggccagc atccatttgc ttttttgag gggggggggt 180
ttctgggtaa atagtacatg cctaggcatc tgatctcagc ttggtttgtt tgtttgaata 240
tatatatact gcgaacattg agatttcagt tggaagacac cctgaaatcc tcacacccca 300
ccaaccctct ctaatggcta gcttgtctgc acaggcaggg tgattcaact ctcaatggag 360
accaaaggac atctagatgg ctaaatgttt gtggaagatc ttggggttgc ttgcctcatt 420
tgctgggaaa aatcaggaag tggccttcag ggacactttt acttggaaaa ttacaacact 480
agttacaagt cacgggttac acatctaaca tttgcttgtt gaaagcaact cataatagca 540
aataaaatta aacatgtctt actttttccc tcacaagaac ataaaaatta ttaaggggaa 600
caggaaattt taaaaaggta acacaatttt tcctttagta gtccttgggt agtttatgac 660
agaaagtttc catttttttg tttgtttctt tgaatgggga ttgttggtcc ctcgtg 716

<210> 65
<211> 456
<212> DNA
<213> Rattus norvegicus

<400> 65
tgtacagttg ctagtttgag gctggtgttg atgttctgac aagagtggct cagccatggc 60
tcagtagagt cctcttctgg aagtttgaga aattctggct tacgggaaaa ggtttttctt 120
tcttttcaag atatgtccaa caaagtcctc ttcggtcagt aatttctgca gtgacgcctt 180
tcgtccgtcc tgtcagcaaa ctccaatcgc aacttgggag tccagtcaat aaagggttaa 240
gcgcacacaa gcgtggccaa ctagtaggtc cgagaggttc accggcaggc accgtactta 300
atatgcagag gggtgggctt cacgcctccc cgccgagcgc tcccacggtc gaggagttgg 360
tgggcaagga gatgaggttt aagtccaatg ggttaaaccc aaccccgaga gggttaaaac 420
tacccgatga cgctgccacg gaggggccga atccac 456

<210> 66
<211> 1640
<212> DNA
<213> Rattus norvegicus

<400> 66
ttttttttt ttttttttca caccagatga cgaatgtata tgaaagttaa ttcattaaat 60
taaaaaaaaa aatcaaacat ttggggaggg ttttttttac aacgaataat tctatacaca 120
tgctatagac acggtttcta taaaacacac tatctacaat ctacttacat ttaattgtcc 180
tgctatttct agttcatgtg agatcagtca caagtgagtc agtttccctg cctgtagaga 240
ctgcgtcatc ccttaatacc agggtcagag gcactggccg agcaaaacaa gattgtaaga 300
atcttatcaa ctatcttgct tatgagaaca gacaccaggg gccaagtgct ctgaaccggc 360

tttggagtta aggcagcaat gtaaggtgtc acgtaaaaac caagtgtgct ctttgaaagc 420
attccatgga tccccaaatg ctggcccctt ttctaagtgc acctctgaag tcgagggaac 480
agctacacat ttgggaaaag tcattcgaga acagccgccc aaaaccttta aagttatagt 540
ttaagcttca ggcaaaagtt caaattactt ctcacaaata gaaagaattc acttttaaa 600
aacgaagtca catttagcca ctttatcaaa acaacttaac accggtacgg aaaacgtacg 660
ctaaaccaaa agtatggttt caatgcacgc cgtgccaaat attttcaaaa cgctagaaga 720
atggtacttc tttctctcag aatttcccag tttgtctgta gcagaacggt attctaaagt 780
ccagtctctg aacatggtca cggccgatga ctgtcatcca gcattaaaat agcctttatc 840
accctcgatg tccacttcct ggtcggaatc ctctgagatc tctgattcag ggtcttccgg 900
agaggctggg gagggtgaac actgagaact gtccaaagag gcacctttat tctgttcact 960
gggcaagtct tggccctggt cacaggaagt gtccaaactg tccaactcat ccttttttatt 1020
gctttgagga ttctcctgct tcagtcgtct ccatttagct ctgcgattct gaaaccaggt 1080
tttgacctgt ctctcgctga gctgcaacat cttggccaga cgctttctct caggtgggga 1140
gaggtatttc tgagtctcga acttcttctc cagctcgatg gtctggtcgt tggaaaacct 1200
cacttgaccg cctttccttt tgtgcagagg tcgctgtagg aaggggttcc agagcaaggg 1260
cttgcccagg gggtcgtggc ggagtagggc gtgcgtgtag tcgttcaccg tccgcgggaa 1320
cgggtacaga gggcctccga agccaccggg gccataggca gcggccagcg cggcggcggg 1380
gtgatgcgag aaggcggggt ggaccggcgt gggctcgtac accggggtcc ggtaggagga 1440
cacgaggctg gtgaaggagg agttggggga cggcagcgtg ggagtgggcg tgggagcggc 1500
gggcccgcga cccaggatgt cgtcgatgta gaaaggcgtc gggtgagcgg gctgcagcag 1560
cggcgtgggc gcgtacagcg ggactccgac ggcgggcgca gccgcgggcc ccgggtgcgg 1620
gaactgcatg gctgctccgc 1640

<210> 67
<211> 370
<212> DNA
<213> Rattus norvegicus

<400> 67
gctagcatct tttttctgcc acgaggtgcg ttttatttttc atcaatcata caaatgattt 60
tccatatcac agggcaagct gagtgcctgg gtgtgttcac agtgtagctt gtcgcttgtg 120
tctgtccatc ttccccgtca gaatggggtc tcagaaatga tgaggtgagg tggagaaatc 180
ctcctaggct tgtaggaaat tttactcctc ttttcctgtt gaatggtctt ttggttggct 240
ggtgttcttc tcatgctctt tggttttctc cagtgtggct ttattgaagc ttgtgatttc 300
ccccatggat aacttgcctg ccatttttctt agaactcttg gaatcttgct ctgagctcat 360
gctccaattg 370

<210> 68
<211> 249
<212> DNA
<213> Rattus norvegicus

<400> 68
aagctttgga gctgctaggt gctacctatg tcgataagaa aagggatctg cttggagccc 60
tgaagcattg gagacgggca atggaactcc gccaccaggg tggggactac cttcctaagc 120
ctgaacccca gcaactggtt ctagcctatg actattccag ggaggtgagc acgccccaag 180
agttggaagc cctcatcaca gatcctgatg agatgcggat gcaggcactg ctgatacggg 240
agaggatcc 249

<210> 69
<211> 1516
<212> DNA
<213> Rattus norvegicus

<400> 69
ttttttttttt tttttctaag aagctgttct catctatgaa ccagatggca tctaccccat 60
ctgttggctg atcagtccga tctttatgcc actcctgtgc tttagtgagc acctggtgac 120
agtcatgatg gggggtgtct aggtcagggt ccgggagcag ggttgtaggg tttagactcg 180
taggggcagt ctgggatcac aaggaacaag tgggataccc ggcccacgcc aaggtccacc 240
gttcttcggg tagtccatga gtatcatttg ttgtcagtag ccccttgtac tcaaggtctt 300
ttgcttgaca ctagcccatt tggacgtagg agcacagagt gttgggcccc cgtattcaca 360
caacaactgg gcgggcttcc cttctatctt tttgcatagc cagcactcta ggaccaagag 420
gcttgccttc caggctgctg gagaggcccc tcttgttctt cctggggcag tccctgaccc 480

agtgtccttt ttctttgcat taggcacact gatctttagc caggaattct cttctgttgc 540
caggtactgt cttcctaggt tccctaacta ctgtggccag tatatgttcc tctcttgtct 600
tttatctctc tttagctctc tagcttcctc ttctttttgt ctcttttctt ccctagcttc 660
ctgctctttt taccttcttt tctctttctc tttgtttaac cttactttct ctgtaactta 720
tactaactct cagcaactta gcttaaccct tcaaatttct gtaactttct cttcataccc 780
tttccttatc ttagccagat tggtggggca ttttccagcc cctaggagac ccaccctcgg 840
agcctggggg cagacctgga gcactcccta ccttcagggg cattgaagtc aacagtcagg 900
agccttccat ccatgtctgg aacattcttt ctggcctcta gcaggattct gtctttcctc 960
agtggtaaag aagatctgta acagttacta acaagcatct cacgtgggat ggtgagaaaa 1020
caagaaggga atctagagga gagaggtcca ctgaagagga caaatagcat ttagtcacac 1080
agctaaacca ggaggccttt ttttggacaa aaaggccact gtaaatataa gcacaagctt 1140
tgtctatgaa acagaaaggc gagcagagag gcagcctagc tgttaccggc tgtctctctg 1200
ggcttagatt ttcccttaag gagtacctac ctcccttcag tgtcagcttg gtggctttgc 1260
ctctcaagag aaccagcctc caaatgacac taggcttcta gtaacaacta ataacaaaag 1320
gatggagaga tggttagaac ctgggtgcta gatactaagc agctgacaaa agaattgtaa 1380
ccagttcacc tggggctttc aggactttag taacagccct ttaccaaact gtctcagtgg 1440
gctataggcc catggaaaag aaaacattaa tcctgacctt gtccaccacc aaagcctgaa 1500
ttctaacctc gtgccg 1516

<210> 70
<211> 2076
<212> DNA
<213> Rattus norvegicus

<400> 70
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acagtctctc tgcatcttct tctacagcta 60
ttaggtgctg tccacttttc tgcacagacc ctgaaccacg catcaactta ttttctctgc 120
aacttacaat aactctctca gtgacttagc tttacccttc aagtttctgt aactttctct 180
tcatatcctt tccttatctt agccagatcc agattggcgg gggattttcc agcccctagg 240
agacccaccc tcggagcctg ggggagacct ggagcactcc ctaccttcag gggcattgaa 300
gtcaacagtc aggagccttc catccatgtc tggaacattc tttctggcct ctagcaggat 360
ctgtctttcc tcagtggtaa agaagatctg taacagttac taacaagcat ctcacgtggg 420
atggtgagaa aacaagaagg gaatctagag gagagaggtc cactgaagag gacaaatagc 480
atttagtcac acagctaaac caggaggcct ttttttgga caaaaaggcc actgtaaata 540
taagcacaag ctttgtctat gaaacagaaa ggcgagcaga gaggcagcct agctgttacc 600
ggctgtctct ctggacttag attttccctt aaggagtacc tacctccctt cagtgtcagc 660
ttggtggctt tgcctctcaa gagaaccagc ctccaaatga cactaggctt ctagtaacaa 720
ctaataacaa aaggatggag agatggttag aacctgggtg ctagatacta agcagctgac 780
aaaagaattg taaccagttc acctggggct ttcaggactt tagtaacagc cctttaccaa 840
actgtctcag tgggctatag gcccatggaa aagaaaacat taatcctgac tggcaaaaca 900
aagttcttca cagttgtaga ttctttgaaa ctattttagg ggctcttttt gtcccccaac 960
ctggggcatt ttaaccatag gggcaggaac tggctgctgt ggggatagga ccaaaggcac 1020
tctccatgtt aatgatgatc agtggagaaa agtaattttg atgttggaga ctactcctcc 1080
ttggatagga cagcagataa ggaggcttct taagactctt aatgagcgct ctcctacttg 1140
agcgaaattc ctttcctgtt ctgttttcct atagccccac tagctctcca gccttttag 1200
tcattcttcc ttgacgattt ctaacacagc ctgtcctttt tttatagcct gttaacagca 1260
tttctgatct tttaggcagc tatcgactaa gtgccatacc gggtgaaact ccgcctttaa 1320
gattccttac tcccaaggaa aatttaaatc tttcccagtt catcacagct ggctgcgagc 1380
ataagcacag aataaaacac tatatgtttt tgttttgttt ttctttcctt ttttcactag 1440
gctggggccc gaacccaggg ccttgcgctt gctaggcaag agctctacca ctgagctaaa 1500
tccccaaccc ccaaaacact atgttttaaa aattaacttt ggctatcaac caacacactg 1560
ccactagagc ggggtctcta caaaattaag tttcttactc actaagcgtt aaggggacca 1620
agtaaaactc ttcgacgaac aaagcaaaca gtttcatgat ttcaaacaca gtcgtcggtc 1680
caagatttta aacacagtcg tcagtccaaa ttcaaacacg aaacaaaagt caaaaagaca 1740
ctaacagaca caacacgtcc agaaaaccac agtcaggtca caaagaagac aaacaattcc 1800
aacagtcaaa caagtaacaa gcagacgcgc cgcgcagctt cggtaccaaa ctgaaaccaa 1860
aaaattcaga cggagtcatc aagggtgcgg atccctccga aaacggacgg aggtgccacg 1920
gatccggatc tccctctcct ccaaccaccc ttggaacgtc ttccagggct gcgggggaga 1980
agtccgagct cgtcagctcc ttctctggcc cgcccagata gtccccagat ctgagcctat 2040
tgatcgatcg ttcacaggac aagacaccct cgtgcc 2076

<210> 71
<211> 64

<212> DNA
<213> Rattus norvegicus

<400> 71
tcatgacctc attttaggac caagagctgt gttggtttct tagattgtta gctttttctc 60
taga 64

<210> 72
<211> 131
<212> DNA
<213> Rattus norvegicus

<400> 72
tctagaaaac ggaggctgtc tggatgcagt agtcatttgc tgcagaggtt ggggaagggg 60
aggccccatg tttctcctgt ggaaagaggg tgtggggctc tgggaaaagg ccactcttca 120
aacattcatg a 131

<210> 73
<211> 124
<212> DNA
<213> Rattus norvegicus

<400> 73
gctagcctta tgccagcctg ccactgtcaa catattctgt tcccattggt tacatgcttg 60
atacatacac tcttgtgttt ttggctaatt gagcttttta attctattgt aatattttca 120
attg 124

<210> 74
<211> 124
<212> DNA
<213> Rattus norvegicus

<400> 74
caattgaaaa tattacaata gaattaaaaa tctcaattag ccaaaaacac aagagtgtat 60
gtatcaagca tgtaaccaat gggaacagaa tatgttgaca gtggcaggct ggcataaggc 120
tagc 124

<210> 75
<211> 1252
<212> DNA
<213> Rattus norvegicus

<400> 75
ttttttttt tttttatgaa gacacgaaat gcatttattc acataacaaa aaacaaaaac 60
aaaaacgaaa aaaacactca ctcccctcttc acttgaaatg tgtcagtaat gactcaaagt 120
gtcatgattt accaggtggt gaattcttct gacaaccagg tgaagaatta ggaaaacata 180
cagttccagt ctttatattc tgaccctaga aatcggttca tttgtagctc ttgggggtac 240
acagtaaagc aggcaagcaa ctgtccacac tgtttcattc cacatactta gtgagtgccc 300
ttattcaggg cctaacttca ctccaggcac aaaaacaagg caggattgcc tggtaagtct 360
gaacatgaga aaagaaaacg atttattaca caacagatat atccatttat gtgagtgttg 420
acatctagga attctctgct ttatagacaa ttagaagcag catcctttct ttagaatatt 480
tctatgccct cactaaaccc atgagtaagt atcttgcttg ggagtcatac ccagagctaa 540
ttacaattca atattctccc tgtacatgca atccttgaaa aacgttatat gtattttatc 600
tcattttcat aaaagaatta caaagacccc aaaaaggttt agtgtttgtt tgcatattaa 660
ggttgcaatt ctccagaaac ccaaagttcg gatagtatgt gacgttgtgc agacaatagt 720
ttacctcatg ctacaggcta taaatgtcag aacagagctt aaacactcac attagtgaac 780
gcattggcac tacttgtact ctttatttta agggctaaga aaaagcacac ttctactcag 840
ccctatggaa gttatcagtg agcacattct ctatcgctca ctgtacagta aactatgtac 900
aacaggcact ataacaaaca gaattttaga gtcaggtatg acatgaaact ttttcaattt 960
tttatattta cactgtgggt ttatcctcat cttaagatca gtttttcatt ttgttttgtt 1020
cttctgtttt tttggttttt tttctgccta aacggtatgc tcaagtagca tggataaatc 1080
ttccagaata tgcactgagt aactccttgg ctcttcccag agccttgcct tcagcacagc 1140
atgatgttaa aagatggtct cattgtagac atcaaagtag gtagaagaac aattgtgtct 1200

gtatcagagg ctctatgaag agacctggag tctcgaagtt ccttcttact ac 1252

<210> 76
<211> 1241
<212> DNA
<213> Rattus norvegicus

<400> 76
aaattttggc tggatccaca gcaagagtcc tcagtattat ttatttgttt tgttttgtgt 60
tctgttttgt ttttactgca acttgacaat aaaagatgtt tggcattgga agagaataga 120
acattaggtc tgggcccagc gctctgactc cgtcttgttt aatagtttaa cctgaagtcg 180
caagactggg ataaacagga gagctgacat gaaggacatc atcgcacatg tttcggctta 240
ctgtgtcaga actacacgtg cttggcctta tttctttgag cctgtggcag aagagtgtat 300
cgaggcagaa agcagaaagg tccaacctcc ctttctagaa aatgtccctt gatgtcctga 360
ttctcttcca ctagtcctca ctactaaagg tcctgtcacc tctcagtaac actgtgggcc 420
gggaaccaag cctcagggca caggcctttg ggagctgtat tagagttctc gagaagaata 480
aacagcactt gcagaaggaa ttcccagaag aagaatgact tacaggcttc tgtccagcta 540
atccaacagt gagcagaaag tccaaaaatc cagcagttcg ggccatgagg ctgggtgtct 600
cggctggtct tcagtagact ctggaatccc aatgacgtag gctctaacgc cagtgaagga 660
atggacttgc caacaaggtg aggccaagca ggcaaagagc aaaagctccc ttcgtcctgt 720
cctcaagtag acttctagca gaaggcgtgg cccagactag aggtgtgtct tcccacctca 780
agatcaggat taaagaagat ctactgactt caaattaagc aaaactccct cccaggtgtg 840
ccctctgtca ttagatttta gttcattcaa gatggagtca agttgacaac caagaatggc 900
catcaccggg gacactccac atataaactg tataccaagc ttcatatttc agacatgttt 960
cttaatgtca tccacgtctc cagcccctgt agtgtgtatg tgttgtattc tctgcagaat 1020
ttagcatgcc cgtgtttcct gtccttcaca taaacgcctt tgtgtgaagc ttgcttgatc 1080
ctccactccc ctctccagcc cccacccctg tgacactgcc cagtaataac tgttcgttgt 1140
ttacctgttg cttgtaagtg caagtattaa agcaatttga aagctaaact cacctgtaag 1200
actataataa atacctgtaa tccaataaaa aaaaaaaaaa a 1241

<210> 77
<211> 396
<212> DNA
<213> Rattus norvegicus

<400> 77
ttttttttt ttttttaaa taataatgtt actgtcgtgt tggctgtata tcattgcata 60
tacttcagga aaagttttct tgttcttgct aaataacaaa gcacaattgg taagttccat 120
ggacagcagg ctccctcaga acgtagccag ttctgtgagg caccccatat cccaaggaca 180
agcttgtggc atgccagatg aacagcagcc ttggcttaca cgcacacctg tacataaaag 240
ctcatctttc caaccacgtg cagccaagag attaccacag acttgacaca gggaccctaa 300
caggctccta tagacagtcc tgccgctcca tgaagtgggg aaggaacaaa tgcagtgacc 360
gcatctaatg cacttccttt gaaaatgttt gcttat 396

<210> 78
<211> 473
<212> DNA
<213> Rattus norvegicus

<400> 78
agatctgagc ggccgcccac ggtcctgatg acagaagagc tctcctcccc gaaaggggca 60
gtccggagcc caccagtgga taccgccagg aaggagataa aggcagctga gcacaatggt 120
gctccagaac gcacagagga gatgaggaca ccggagcccc tggaggaggg tctagcagag 180
gaagctggca gggctgagcg cagtgacagc aggggcagcc cacagggtgg ccggcgctat 240
gtgcaggtga tgggcagcgg gctgctggcg gagatgaagg ctaaacagga gcggagagca 300
gcatgtgcgc agaagaagct tggcaacgat gtcatctccc aggatccctc cagcccagtc 360
atgagcaaca cagagcgatt agatggaggg gcaacagtgc ctaaactgca accaggtctt 420
ccagaggccc gctttggttt gggaacacca gaaaagaatg ccaaagctga acc 473

<210> 79
<211> 1221
<212> DNA
<213> Rattus norvegicus

<400> 79
ttttttttt ttttgtttgt gaaagtacag aaaactttat tggaaatctc ttgattatat 60
ttccaagtgt agctctcatt tcctaacaaa gcactggagg aggggcttca cagccacctg 120
gtcccagcct gagcttggct gcgggagttg tctagagccc gtttcttcca ttgtgtagga 180
ctgaggggca caggccacct tgaaggatgc ttcgctcagc ttccctggcc tctttcttaa 240
gaatctggga cataaaggct gctgtctaga ggccactggc tgagccctga aaagaatccg 300
tgccctcacc ccccttttag tgctggccct ggggggtaaa tcctgttcag taggctatga 360
atgtgccccc gacccaaagg ctgcaatggc acttggccac cactgctggg cacatttctc 420
tgtggcagca aaagcatgca caggggaaag gctccagtgt tacatgcaga ttactaacag 480
cagttgagag ccacctgctc caatgcgtaa cggctgctgc cagtgaggat ccagggacaa 540
gaacaggaca ggctggcaga ggcacttgac tgactcaagc aacaatacct gaaggtttaa 600
gtcaaccata ggctcagctt tggtttctca aaagggaacc aatccagctt gtaagcccag 660
ggccatgtac agactctgga attagaggga gggagagagg gaggaacagc tccctagtcc 720
tgctccagct caggggctgg agcagcaggt tatacagtgc tcctctgggc accatgggca 780
acacacctct gaggagtcct cacactgaac acacctgaga cctcctgggc tgctagaaca 840
gagctagtca cattacagat gctgtgtcaa cagagtatgc tcggcaggag cacgcagcat 900
gccgggaagc ctgatgcctg ctcagttcca tacacacagt ttgagggggc tactttgcct 960
ttgccagacc cattgctgat ctctccttag gtgtgacagg aagatcctca gagcagtagc 1020
acaggttctg agtaatcttc accggaggcc tacagcccag agaaaccctc ctccttcccc 1080
agcagaactg ctaaccccaa acatacttct tttataaaat atctgatttc tctgacagta 1140
ataaatattt accatgttct atatccacgc agcagcgatc gagggaaaac gaggaggaaa 1200
aaagatccta caggcggccg c 1221

<210> 80
<211> 695
<212> DNA
<213> Rattus norvegicus

<400> 80
ttttttttt ttttttttga ttgaaaatgt ttaatttgta aggcacacag tttatgatca 60
ttttaatatc taaaagaacg aaattaacag gactaaaacc tgattgtcga atcatttacc 120
aagtttggat gtcacgttgt aaaagcaggc ttaaaaagat gactccttac aaaggagtga 180
ggtggacctg ggtgggacag gctagacatg gccctgaaaa ccttcttggg tgacaaagaa 240
acagactact ggactgaagc cacagcttcc aagaaacaag aaaatgtagt ggccaccaca 300
ttgggctttg tttccttatg agacattttc cacctcatct cgggatctta ctgttaccct 360
tgcccaaact gcttatggca tgagggttcc agagcccagc gccccagcca agtgtacaaa 420
agacgtttcc tgtagagtgt gcctgtgagg gacaagcttg aggagtcctg tagagcgtcc 480
agacaagctc acatttcctc attcatggat gatgaagggg atgtcacaag cagaccagaa 540
actcctcaat gtctcaggaa aggaccgttt tccagagcgg cttacaagtg ggactttctg 600
ggtttccatc tggagtttgg ttttcctgct tggcctcaga ctgagataga agagcagtga 660
gacagaaagt agacagagaa tgagctagcc tccgg 695

<210> 81
<211> 771
<212> DNA
<213> Rattus norvegicus

<400> 81
ttttttttt ttttttaga ggttaaaggt gttcatttgc caaccggaca gcctgagttg 60
gatcccctga gcccccatgg tggaaggaaa ggattggctc ctgtaagttg tccactcttc 120
tgaagtatgt gcactgcggt gtgtacctgc ccacatacac aaacaggcta ggtagagaag 180
aaaagggaaa ccattaatag tcaacactga tacttatcaa aaatggcact agatggtgat 240
ggtttaaaag cttcacttag aagccaacag tgacagcaga gacagacctc tgttaaccat 300
tgcaggcaaa actgaaagac atgctcacac aggaagcaag cacaggcggc tttgttgacg 360
gcttagctga aacagactca agacaaagcg tgttaacaga cagacgcact tcacggtgac 420
acgaggggcc agctaccaag aagacattga ccccaaaaca tgtatacacg ccaacagaat 480
cccaaaaggc acagtgagaa aggacagaag gaaagttcga aatagaactt tgtgctgccg 540
aggtaggaga ttaacttccc ctggagattt ccacagtggc caaaacttcg gtgaggatat 600
ggaagacgga ggtaccatct gagcttgatc agactctcta aggtgtgata ttgcaaatag 660
tgcaagccaa acgactcagc gggcacatca caggttcaag accagcctga gaaacttagc 720
agggccctgt ctcaaaatta aaagaggttg tttttaagga ccagcctcgt g 771

<210> 82
<211> 2262
<212> DNA
<213> Rattus norvegicus

<400> 82
cacgagggat caccagatgc tgccaggtgc tggttgccaa ggttgaaatg agaagtttct 60
gttaactggg tacagagttt cagttttaca aggtgaagaa gttgggcaga cagatggtag 120
ggatggtcac acaaagatat gaatgtattt actgccactg aagcaacact aaggtggtta 180
atctgagaag ttatgtttat tatttaaagg actaaattgt caagctaact tcaataactg 240
ttttattttg tacaactgac atattcatat agatgacatc tctaaagatg tctttatcag 300
tatttaaaac tgtgttacat ctcttaggaa tttgacacac agtttcactt gtaaggccag 360
ataaccaatt gtagggtgcg ttattaccca gaatgtggtg ggtccaagag cttgaactca 420
cgatcaagtt tggtgacact tgcctttacc cactgagcct tctcatcaac ccaagtttcc 480
caggaattaa gtaatctgtt tccctaattc cccttaagca aacatggcag tcaagtgtac 540
agcaggagac aggttatgat ttgcatgatg taatttaata atgtaaccat ctttggggaa 600
tctaattagt accaaaagag aaaaaaaaaa ccaacaggaa acagctgtct ctctcacaca 660
gtgttgagag ctttccctcc cactcattgc caatcagtgt cctggtgtcc cctcaccctg 720
cctctgtctc tgcaacctgc cagcctccaa ctgaacagac ttccattcct gtgcaatcta 780
agtcagtctc tccagtctct tcctccctcc ctccctcgct ctccctctct cttataaagg 840
aaagaaagca ctcactgggt ataattgatg tctatatgca ggtgagggca ggtacaagat 900
aaggcaagac ctgtgattgg gcagtgaaaa aagaaaggcg ggggcagagg ttttgtaagg 960
caggagagat gaggaggtag aagaaccaag aaaaaggcag agaaggacga cccagatctg 1020
cgtggcttta accgggcaaa ggtagctatg aatatttcat aagggacaga tttatatagg 1080
acaatttgtc ttacctaggt gggcagttta catcaatacc aattggttgt gactttattg 1140
tgtggacgtt ttgtggactg agaatttgct gatatgaatc tgactgctaa attacaagct 1200
ttgggttttg attttaactg gctactggga gttgtgactg tagccacagg ggcagatgct 1260
gggattgtga gcagggttca cagcacagtc ccaggatggc agctgctgct gggcccagag 1320
aggagccagt gccaacatgg ggctagccat ggaggtggag agatcgctgg ggacagagaa 1380
gagcaggagg cagtgtggct tggtgcctgg tgccccaccc acccctgcat ccattttaat 1440
tatttactgc tacaactggg tgcttgcttt tagtttcaga gggttagtcc attagcatcc 1500
tgaggagaag catgcaggca ggcagacagg catggtgcta gaagggtagc tgagagcttt 1560
aaatcgtgat ccgcacgctg cagagagaga aaaaggaaac agagatggag ggatgactgt 1620
ccctggcaag gactttcaaa ccttaaaagc cacctctagg gacacacctc ttccaacaag 1680
gccacacccc tactccttcc caacagtcca ccaactgtga acaaagcatc caaatgtatg 1740
ggccgatggg gccattccta ttcaagccac ctcactgaag gaataaatta acatgtccca 1800
aagtattaaa tgtagtcatt tttctcagta ctgagacaaa atatctcaag aaataaaaaa 1860
acactgaagg acgtatttcg tttggctccc cctttaaaag aaacagtcca ccatggccgg 1920
gaaggcatgt ggctggtcag agtgcaccct catgcaggaa gcagagagtg ggggagtgct 1980
cctcgaagcc ttttcctttt tatttagcat gcaccccaag cccacaggag ctggctaacc 2040
cagcaagcct tgctggcctg gaagccaccc ccaacaacca tcatcacccc agtgcctccc 2100
tacagtgggg attatgagtt gccaccatgc tgtttttcac atgggtgcag gggatttgaa 2160
accacagcct cctgcttgta cagaaagcat cctgaggagc catctctctg gattcaccct 2220
tcacttttgg ctgactgggc ctgagctgga gtcacctggg ct 2262

<210> 83
<211> 422
<212> DNA
<213> Rattus norvegicus

<400> 83
ttttttttt ttttttggt ttgttttgtt ttgtttttct ttgcttttct aaggatagtt 60
taaaatacaa acaaattaaa gtatgtgata tgtcaacatg atcatgcccc tcccagacac 120
agcctttaac tgtccagctc aaataagaga aatgctgaag cttaagatgt ctttgtcctc 180
aggaagacat cacatgtgtg gttgtcctga cactgcacat ggcagcttcc ccacaacatg 240
ggcccttcgc cttcacactg acaagaagtg tatgcccttc acactgacaa gaactgtgtg 300
ctcactacaa cttgtattgg ttgtaccttc cccaaaagca gtaatgtatt tctcaagatg 360
tcctaaatca agtggagact ctcctctgga aggaactgga ctcagcctcg tgccgaattc 420
tt 422

<210> 84
<211> 445
<212> DNA

<213> Rattus norvegicus

<400> 84
ttttttttt tttttttcag acaaggatgg tttattgaat ggacccctg agactgatca 60
atcagggcca gggccgcagc ctcagaattc aggggctgag ccatgactct gaccatttct 120
cagggccggc ttataaaggg aaaaccccac aaagccacaa tgagctcgca tgcaggtgct 180
gccggatggt tggctctgac tcaagccatt tcagacagaa cagctcatat ttacctttaa 240
tgtggtgggc catatgtaaa gctttgtgta atttattaag ttgaacaaac ctcacagcat 300
gaccttgctc tgagtcgagt cattttctgt atcaatgatg gcaggcatgg aacaaaatgg 360
ctatagctat gctaggtggg gtagacctca acaggataag aaactaaaaa gtaacaaaga 420
tgagaagaca attgggcatc ctggt 445

<210> 85
<211> 482
<212> DNA
<213> Rattus norvegicus

<400> 85
tctttttttt cggagctggg gaccgaaccc agggccttgc gcttcctagg caagcgctct 60
accactgagc taaatcccca gccccaggaa caagccttct taaacaacca ccccatctct 120
ccagtccctg atcaatattt tatgactacg tttactctgt aaaacaaagg attaaaatct 180
aatccgatta ccagtcttac tagacaaacc ttccaaatct gagttttctc aagtataaac 240
acttcacaac accttctgag aaatgtccac atcactcaaa gacaacacat ttgggaggtt 300
tttatgggct tcttttcata cagaaccttt caaagcttgt aaaacttcga acctagggac 360
atttgggagt tcttctcggt ctcacacaaa acggacttgc tttcaaagat cccttcggat 420
tctatttgac ttagcaaaaa cacagcgcaa aacacacccc tgtaagaaca aaggtgcaat 480
tg 482

<210> 86
<211> 784
<212> DNA
<213> Rattus norvegicus

<400> 86
agttcatgtg cattggtgtt tgctcacatg catgtctgtg acgtatgcct gtaggagggc 60
atcagatccc tgcaactgga gttattgaca gttgtgagct accatgtggg ctgtgggaat 120
taaacctcga aaagcagcca gtgctcttaa ccactgagcc atctttccag ccacctcaac 180
tcattcttaa atccacttaa gacatagagg aaacactatt ccttctattc tgtttgctga 240
tatctgtaaa agtagacaga cttgcagagt ggtggtggca gacaccttta atgtcagcac 300
tcaagaggca gaggaagaca gatctgagtt caaggctacc ctgatctaca gatagagttt 360
caggtcagtc agagctttat agagagacct gtctcaaaat acaaaaaaca aaaccaaatt 420
aagtagacag actcccactt acacgaaacg taaacactgt ttcacacact tcagaatcac 480
atttaaacta ccaatcaaca agaactgaca gaaccaatat caggaaacct catccatata 540
aagcaacgtc acagcaccaa gcagttaaca gcttttggct cgctctaatc gaggatccca 600
aacacaaatc ttacacagac atggggaggt acatcctaca tctcatctcg gtcgcagctc 660
atcgtcagtc ctagggatct tttgggtccc cacaaagatg gaggcatagc cttgctcttc 720
ttgcccgaca aggaggccag caggccagga agttaaactg ccaatacctg ccaatgctgg 780
tctc 784

<210> 87
<211> 486
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<222> (19)..(19)
<223> Wherein n may be a, c, g or t

<220>
<221> misc_feature
<222> (22)..(22)
<223> Wherein n may be a, c, g or t

<220>
<221> misc_feature
<222> (107)..(107)
<223> Wherein n may be a, c, g or t

<400> 87
ttttttttttt ttttttttana gnagctgtat tttctttata ttctgcatgg gatatgaaat 60
aggggttttg ctccacaggg agcctggtca atatagacag gatgtantca gggtgtgtct 120
tccaaggtca tctccatttc caggcagatg gaaaaaaaat catgaacaat catgttgatg 180
attttgaaag atgagtatag gcaatagcat gtgtcctctg tcctgagcaa cagatctcag 240
ggatgtgagg gtgtgcgctt tctggatggt tcaccatacg catcttcagc accaaggcta 300
tgcaagcttt gttcagtaag gcagaacatc aggaactcag gagagtggct cccggaaggt 360
gatcatgtgg cttgacccct gattatccat cttcctcacc aatggtttgc ttacattcga 420
agcttaaagc cttaaagtta acttcgtctt gtgatgctgt taaatgtttt caattacagc 480
acgatc 486

<210> 88
<211> 921
<212> DNA
<213> Rattus norvegicus

<400> 88
ttttttttttt ttttttttaa gagaaacatt ttaatatctg caggctcacg caggattcaa 60
ctgtgtgtgg tacagtctag agtgacttgc ttctatttac ttccacacac ggtgactttc 120
gatgagatgg ttaagctgag cagtatacat tcctgaacag tgccaaggat cctgttttca 180
aacagcttta tcaatcgaaa catcctcaaa gagccattgg aggcagtgtg gctgggccat 240
ctgcactaaa atcgcttatt cagaaggtgt caaagcagcc gagggccttg agccacaggt 300
tgctggtgtt cacatctcag ctgggacgtg ataaagactg catgagctgc agatccgcaa 360
acagccttgc aggctggctc tgctcctgca aagtcaatgg agccacaagg tacttcttaa 420
tggtgtcatc tgttcaggtt ctccagggag ttaagggaag cactgtcttt gcacacagtc 480
tctatcacaa gggctctggc tagcagcatg agagttccct ctcagccagg ctgccacagt 540
gagccatcta ttgtcctcac tgcagagtgc acaggatgaa gatgtccact ttcctcatca 600
gacttgctga cagcctcatt tcctgccaaa cggatcagac cacactttca accctggtgg 660
ctgcacatct tcctggacga taccagctcg atttacagcc tgctccttct ggtattcttc 720
cagccgcaga aggggccgga agtagatagg gtagaaggcg gctccgacca tagagatgaa 780
gcctccgaat atgagcgcgg tgcgcaggtt ccgggccgcg gccatggtga gaaagggggc 840
tgcagggcgg gcgaaggccc ggcacgctcc gaaacccgac tcccagcctt aaggtcgcga 900
cccggctcgg aagaggcgga g 921

<210> 89
<211> 525
<212> DNA
<213> Rattus norvegicus

<400> 89
ttttttttttt ttttttttaca tttatgaatt tttaatactc ctgtcaagat cttacaagga 60
gaaattactt tgggaggtgg gtatggaggt tagaggtagg ttggaaagtg gatcatgatc 120
tcaaaatagt aaatgctagc tgagtggctt tcccagagag aagcgacatg ccctgacgag 180
actggagaac atgtgtaaag gagagcttat tttcaggtct ccgctggcct ccatcctctt 240
caaaaacctc agctcctggg ttctgctcaa cccacattct gtaatacttg ctcaagtagg 300
cctgtagcac cttgtaggat acagacagtt ccaaatggat gtccactcca gtctctggct 360
gctctattct gtacttctct tgaatcacag cttttatcca tgtaagtaga tgcctttacc 420
tgggcacttg aagttcagag gagacaggtc tttagataga aatgtgcaaa ttacttatgt 480
ggttattgac aatcaatgac tgttctcccg tagtctcccc tcgtg 525

<210> 90
<211> 930
<212> DNA
<213> Rattus norvegicus

<400> 90
ttttttttttt ttttttttac ataaactatt ttatttaaat aaaaccagga ctgaccctct 60

cccacacgca ccagcacatg cactcgcaca atcatgtcct ccgtttctgt tcctcctgaa 120
cagccacctc aaaccccaca ggttttcatt gtgaccatcc ttgaaacctg aaaattggga 180
gatcccatgc gaaacactgg cactcttccc ccaaccctgg gcaagcattc tcctcatcct 240
cctggtggga caggagctca gctcttccaa ggcacccaga tctggtgtgg tttcccttca 300
cacaacccgg gaacaccaat acccagagct gctctttgag gctgggaccc ctcgcttcag 360
gtcaactcct ctcacacaac agaggaggct ttgtaaccat gcttaagcgc tctccaaagg 420
ttcctggcat aggtaccgtc tggtatgagg aagagcgaca gagagcaatt gagcaccaag 480
ttccctaatg ccaccctgaa ggagggtgcc aagctccagt tcagtctgta ccaagaaaaa 540
gcaagcctag cgccacacat ggggaaggtg gggatggcaa ggtctcagcc ttgagaatct 600
cacatctcta ccctccagca tagatcccat gagggaccca ctagcacctt ggcgattgta 660
agggctcagc ccaactggag acacaccaca caaacagtgg ccatttggag ttggcccaaa 720
tgcctgtgtc ggtaacaggg tttgactccc gcatctaaca ctgactgaag gacacacagc 780
acagcagcta aggtcacgag aggtgcactg acagaaggtg ttgtcttcca gaggcacatg 840
gacatttcac acactgctca caggcaagct gggacaggag aagagcacag gctgccaggg 900
actcagcagc gtatctaggg catgccctct 930

<210> 91
<211> 1060
<212> DNA
<213> Rattus norvegicus

<400> 91
ttttttttt ttttttttgg ggtttggtat catttatttt ttttcttaaa cccacttgta 60
gtttgggttc agctgggaag caggatatac gggtagaggg aaggggacgg tgcgagcagg 120
attggcccat agctttgggg gcaatctcca aaccctgctc cagggaggta ggtcctgttg 180
tcaggctccc agctggctca ggtgaggctc caaatggatc ttctggagca agtgtcctga 240
gcagaggaga atttccattc tctccaaccc acctcctcaa agacccagtc agaaggtttt 300
ccaacacagt gccaggcagt tgaggggaca tcaggccacg ggcaggcctg agtgggtggg 360
acaaggaaca ctgtctggct tctggttcca ggtaacaacc taggatgtgg ctacccagag 420
gctgccatct agagtgacct ccgggagctg cttctcttgc ttcctgggct gcctgggatc 480
caaacctgca gctgccctgg ttgcaaccag tggtatactt cccacccccc acccctcaga 540
caaaataaaa taaaataaaa tacaataaaa attagaataa ataccaatcg ggtcaacatt 600
tacatttaca caaatggaca agatgatccc ccaaaccgta gaagtttaca gactggatgg 660
gaaggatacg cagatgaaga tggttttggg gaggaagagg ttcgccgtgg tggttgatgg 720
tgggggtcc tggccctgtc caggggaggg ccagagccct gcaggaactg tggtctcaga 780
gcttaggcaa tacggccagt tcatgaggag aacagtgacc tgcaggccac ttgagtagaa 840
aacaaggacc aacttgtcct gacaggtagg ggagcctaaa aaggctcaat atgagatcgc 900
catggccagc aggacaccac agtttgggag aggcttcgcc tcctgttcat ccattcagag 960
gcggctttga taggccgtcc ctctggcagc gggagagcct ctggcctggg gaggtcaggg 1020
tctgtgggta cctgcaacgc ccctacttcc cctcgtgccg 1060

<210> 92
<211> 1158
<212> DNA
<213> Rattus norvegicus

<400> 92
tggctcagtg gtcgagcaca gtaacaacat ggagattcta aaaacagaga aagagaaaag 60
caagaagata gtggagggag acaagaagaa aggctggggg gccagttttg ttatttttgt 120
tttggttcag ctatatgctc cacacttcca aagcagcaaa tgtgttgcat caccacccaa 180
acctgagaaa gctacagcat cactggcaag gacaagctag cgcacgggtg acatcctcta 240
accctgccat tgtaaattat acaactgcag tttccagcac acaccattgc ctccgacact 300
attggagagc ccgtgacact ccaaaaactg ctaaggcctt tacagtatct gaccttcaat 360
ggccccgaaa actggtaggc cgcttctccc cattccaacc caaaaattac atgcgagcaa 420
cggaagagaa aagcttttaa gcccgcgcgg acgaagagac cagcggacgc tgctgaagac 480
cacagaccag gtaagccagc tgaggctgga gtttattgcc gatgagcgct gagtcctggg 540
gaggagcggg gaaggataag gtcgggcagg atcaggacct tggctaggag aggcggcgcc 600
acgaaggcga ggccgggagg tgcagacaga caggcgcagg ccacggtggg ggcgggccag 660
gctatccagg cactcggtga gcggtctccg gcgtcgctcc cggagctggg tggcggctgt 720
ggcggcggct ccgcggcagt cctggctgcg gtcgtggccc accggaggcc ccaagcaagc 780
aggacgcggc gggaggcggg gcgggtggtg ctgctcgagc acacggagca gctgcagcgc 840
tgggcaaggg gtcggcgggg cccgcaggcg gccgcgtggg gacccagatg agcccgtagt 900
ataccgcaag caacacagca gccaaggata cacacaggaa gtaggcgcag acaggggcga 960

gccgcagcca tcgggcgcgg ggcccctcgc tcagccccgt accacctggg ctctcgccac 1020
cactgcccac gcagctcgag cccccgcatg cgctgcccac tcagcctgta ccgaccccgc 1080
ccccaccccg ccgcttctag caagccacgc cccttctaga gtcacgccct atcagaccgc 1140
caccccctc gtgccgaa 1158

<210> 93
<211> 1241
<212> DNA
<213> Rattus norvegicus

<400> 93
aaaaatctcg atgccctcaa ctgttaggtt aaagcctgac ctgtgtcact atgtgctgtg 60
acacgaacct aattcccaag tggacaggga cacctgagtg gcatttcgtg cttcagttcc 120
ttccctcatg attcttgctg ggtcctcttc actgaggctc tcccctgagt catatattta 180
ctggaaaggc tacctggaga gcctttgaat tgtgggcatt ccttttaat gtgtccctct 240
cttccacaga tgaaacagcg cttttctctt gagtctctgt catcctgtct cttccacttt 300
tcggctggtg tcctgacaag tttctcccgg cccaggtcaa cagctgccct cattggcttg 360
gctttggcag ctgtgcacgg tgcagccttg tcttcttttg ctgacacttc cttttctgtg 420
tacttgttct gaatttcttt gtcctctttg cttctttttt ctttgctctc tgtgtacctt 480
tggtttgggg tatcttcctg gtctcgccgc cgcctcactt ttctcctcat gggacagtcc 540
ttcatgaagt ggccaatttt cccacagatc cggcagcacc tgtcatttgg ggccagttct 600
ccctcagtca ggacatccgg atcaaagaag tatgccagga tgtcctttgg aaatcctttg 660
actggaattc caaatactct tctaccattg ataaaagctt tcattataaa atttgtcatt 720
ttccttgata atccagcacc aagattgtgg ttcaaatcaa agggatcttc aatgacgatg 780
tattttgagg tccactgttt cttaaaagtt gtaagcagac tttttcttct gatgctgatt 840
acgtgttcct taaagtcaaa ctcctcagtg tagaagcgta gaagtcccaa ccacagctgc 900
ccaacagatt ctgtattttt tccatattct ggccaacaag tgggcagttc atttatttga 960
tcgaaaaagt agatattcca gccatcaaca agtatttctg gtttcttttc acctttgtat 1020
atctcctgaa gcacagggat gacaggggag gaccgctgct ggaggaagta cagcaccata 1080
agagtgtaag cgtatgatga caagctgcct ctggacgcgt caccgatgtc acacatcttt 1140
gtgaacactt tcatggtgta gcacaggtat ttcactctgg ggtcaatggc tgagtatgca 1200
aacaggagcc gcgtgttgtg aagagccagt gtgtcctcgt g 1241

<210> 94
<211> 2695
<212> DNA
<213> Rattus norvegicus

<400> 94
ttttttttt ttttttttcc aggagtccct tcggtccctg atagcgggag cctggacctc 60
tgaggccgag agggtgctgt gtccccggcc tccgagccga ggtggcccgg ctaggggcg 120
ccacggagtt ttttttttt tttcttttc ttttccagga gtcccttcgg tcccagccag 180
cgggaccata gacacttttg aggccgagag ggtgctgtgt ccccggcctc cgagccgagg 240
tggcccggct aggtggcgcc acggattttt tttttctttt ccaggagtcc cttcggtccc 300
tgatagcggg agcctggacc tctgaggccg agagggtgct gtgtccccgg cctccgagcc 360
gaggtggccc ggctaggggg cgcctccgag gctttatttt ttccaggatc ctccccggtc 420
cctgccagcg ggagcatgga cttctgaggc cgaggggaag ctgtgttcca ggctatctac 480
catggcctcc tcggtctgtg agcactcagg gttctaaggt cgaccagttg ttcctttgcg 540
gtccggttct ctttctacat ggggacctct tggggacacg tcaccgaaca tgacttccag 600
acgttccgtg tggcctgtca tgtttatccc tgtgtctttt acacttttca tctttgctat 660
ctgtccttat tgtacctgga gatatatgct gacacgctgt ccttttgact ctttttgtca 720
ttaaaggacg ttggaagagg cttgcaccaa ggctgtttgc ttgtccagcc ctagctcttt 780
tcttctgcgc atgggcctct tcgatgcttg aagcttagcg tccccccatg agtacgcgct 840
tcctgctttc ccgtgcttgc ttgcctgtgc tctgtggggc agctttatga caaccgtccc 900
gcgtgtcagg cgttcccgat ttccccgtgg tggttgtcgt ccgttaccgg taggagtcgt 960
tggtgccgag tgcgactgaa agggttttcc cgtttggtgc tagtgacccc ctggcgtgct 1020
cctctgcggc cgaccggttt ttttatttgt ttttttttt tttgtttttt ttttgttttt 1080
ttttttgttt tttggaagga gttcccgaac ctccgctgct tggtggtgtg tccctttctt 1140
tcctgctgtg tgcctcccga gttgcacctt ttctccttcg aaggggattt tatttttta 1200
tttttatttt ttttttattt ttatttttt tgaaggagtt cccgaacctc cgctgcccgt 1260
tgagtcccgt tcttccacgc cacgtgcctc ccgagtgcaa cgcttccttt tttttctcgc 1320
cctcgagaag ggtaaatttt ttttttgtgt gtgtgtgtgg cagtgttagc gacttcttcc 1380
cgtgctctct ctcgctcttc tcgctcgtat tcccgtccag tgcgtgttag aaagctctca 1440

cgcccgttgt tcccgatgca tggcgtgtct cgctcccgtt ggatcgatgt ggtgctgccg 1500
cgttctcttc gggccggggc ctaagccgcg ccaggcgagg gacggacatt catggcgaat 1560
ggtcattcag cgcgaatggc gaccgctctt ctcgttctgc cagcgggccc ctcgtctctc 1620
ctccccattc ctttgcaggg tggtgtgtgg aagtcagggg tgcggctgtc cggcacgagc 1680
gctgacccgc gcacacttgc tgctgtggtt cgcggtgtcc ctgtggacgt gtcgggggcg 1740
cttgccccca cgccgttcac tgcttcgcgg ccctcttccc ccgtgccggg ggaaggtggt 1800
agacccgctg cggtgcatac ccttcccgaa tggtgtgtgc acgcgccctg ctttgtgtga 1860
gccttgcggt gctcctggag cgttccgggc tttgaccacc aaggtgcccg cttctgagtt 1920
ggcggtggcg cttcccgctc cccggcgtgc ctcctgtgct ccatggtgct tgtgccttta 1980
cgctttccct tgtcctagtt gccggctttc tgcacggtga cagaaagggg gggggtcgag 2040
gagttgagtg tgcggttaaa aggctccttc cgttgggtga gcgcccaccc cgtgcctatg 2100
tttttggtgc cttcacccgc gggccctgcg cggttagggt ggtgctgagc gatcgcggct 2160
ggccctttt aaagaccgga ctccctcaag tcaaggctcc tcctttgtgt gcgccttgaa 2220
gaggcctggc cctcggcggg gacctgtcgc aggtcccccc ggtccgcgaa tgctcaagaa 2280
gaccccggag aaagagacct ttgccgatac cgcagacccc ccaccagctg gcgcgtggtc 2340
cttcccgttc tgtcccgcgc ctgttgctcg tttcccgttg cgtgcacgga gcccttggct 2400
gctcgtcggt gttgggttcg tcccgccctc agtgaggaat ttgccttctc tagctatctt 2460
cggaaagggc tttacgatct ccgaggggct tctcccggat ggtcccctcg gctgcccgcc 2520
ctgacctcag ccttctgcgc gcagcgtttg ctctctcgcc taccgcgacc cgcgcctccc 2580
cgctccgagt acgaggaggg atcacgcggg acggggctct gtcgacctgc cgctgtgcgg 2640
agcttgtggg ggagattggg tttctggtgg caggtggcgg ggaagggccg tgcac 2695

<210> 95
<211> 2423
<212> DNA
<213> Rattus norvegicus

<400> 95
ttttttttt ttgtttttca agttgcacat tttaatttac aatgtttacc agtaaaaagg 60
attagttaca aaaaggaaag ctgtctgtac aaaataaggg ttttttttt tcacattcat 120
aaagagaacc cactgtgaat tcttaccttg tgaagtcaat actcaaacag ctcactttgg 180
taaaactatc ttggaaggac tagtaatcca ggcaagataa taaaattatc agcttcccaa 240
tcatgtccag gagaaagaat tttctgaaca ttttccctgt acagaaaagc tctctgtact 300
tgcagatcct tagaaaagcc agtgctctca ggagacagcc tggtaccagg acgaagcata 360
atctcctgct cactcaaatg gcaatccttc ctgaatctga cagacacaca tttatcatag 420
cctcaggtca gcaggagaac cagatggttc aggatcagcc tctctccact caatagttta 480
tcatataaat taaatatgga gaggtacaca tgagaaaggg ggagctcttt ttcaaactcc 540
cacttcctaa tataatacac atcacagttt taatgagcag agaagggtaa gtcaccctgg 600
tttgggcaca tttcctcaag ggaaaaacca aagtatcaaa agccttcaaa gcatactggc 660
ccgtcccact gcagccagca gcctgattcc agaatgaaag catacagtag ctgtaaagcc 720
ctggagcctt cagaaagctt tatttagtga taagctgagc tctgctggca aaagcccacc 780
tataaaaagg gagcaggtct gattcacaaa gtgtatacat gcatgaccca aggtaatgaa 840
gaccttcaaa tgcaaatgat cctaaagcta ttggaacctc taattacgag tgacccgttc 900
agatgtgcct ccattagcct taaaaactga ccaacacaca tctgaagagg cacttccctt 960
agcattaaca taaacacttg accagaaaag gcatggtcca aaaaacagtt aactaaaaat 1020
ttagagtcta aacctctctt ctccaccgac tgaatgaaca cacccgcaat gaggaccaaa 1080
cagaatcagt gcctccaggg acgtgtgtct gtctggccat gtgatcagga acctcctaac 1140
atagcacagc acagcacagc tgctctgggc acacaaagcc agttcacccc atgaagaaac 1200
acaagggatt gtgattaaac ccatcccctg tgtcaggagc aactccacta tggttttgat 1260
cactcagctc agagggatag gagtgcctag caacaagtcc taatcctcgt tactcccagt 1320
ccgggccctc actgactcag aggtgccttt gtgtataaat atgtgagagg cagcaaatgg 1380
cagcactgct gacaggctaa tgcaggcccc acagcggaga aagttcttcc tctgctgctc 1440
caatcttctc cctacagtta cagtcctgcc agtgatggcc aaggaccatg tgtgagccag 1500
ctctttgtga ccaagctttg gcaagtcagt aagtttgtca aaggcaaaat ccttctgtgg 1560
acaatgctag ctgcagctct ggggacgtgt gagagaggag agggtcctct gacgggattg 1620
gggacgtgtg agagaggaga gggtcctctg agaggatttg actcatcagc ccctcttgcc 1680
cagttcatta atcagaagga aggggagagg agaagacagc agaacatgag tcagttgtga 1740
aatctgcaca gctgacattt gctcttcaca gcagaaagga cttgaatgag aatcatgaaa 1800
cttgaggaac acttgtattt tccttcggga tttaaaaatg tgtcttgtac caaaagacta 1860
cattcagtgt gggtcaggtc caagagcggc agcaagagct cggccattaa gcgtgcccag 1920
cactgggagg agactgtcat ctgcttagca tggctggtga gcaggccagg gctgctcctc 1980
actggtctcc aagtcggaag ccctggcccc agttgtgtct cccacctccg ccattctgat 2040
cagcagctcg cctcatgctt gcaggggggca caccgaagcc cgacacccct cctctcctgc 2100

tgggtagcca gcggtacaaa aactgaggtg tggacagaaa attccttcct cccaaatcca 2160
ttgggtatct gaacatcagg aagaaataaa gatgtccgac aaggtttcca atgagctcat 2220
tgatgaccga gcctccaatg atatagttga atccgaggat aacccaaggt aagtaacagg 2280
ccttaaatcg tgttccaaac caaaatgata caatcaggtc tctgttcagc tgggcccaga 2340
cgtaaagtac tgacatgatt agaggaatca tcagcaactg catatccatg gctaagccag 2400
taataacaat gcagatccag ttg 2423

<210> 96
<211> 610
<212> DNA
<213> Rattus norvegicus

<400> 96
aaatttcaag aggtcagagt ggggcttaga ttaagtaact aatgcacagc aaaacgctgt 60
gagattaggt gtgaaggagc tggctgccct cctgtctctt cccttctcta tcccacagga 120
gctacagaga gagcacagca gccagacgct ggccaaacag ggaacactct ttatgccaag 180
tcgcaaagat gacaagcggc atgaggagga cccagggccc tcctttgtgt ggaaggacgg 240
agaggttctg ggagggctgg gaagggtatg ggaggatcct ttgtgtggga ggattgagga 300
aggcctgggc aggctgggaa gggctaggac cgctctcctt tgtgttagag gtctgggaaa 360
gtctgggagg atcctccttt gtgtgggagg actgaggggc tctgggaggg ctgggagggc 420
cctcctttgc ttcacagttt tagatgttgt tccatctgct ctcggagttt gaatttctgg 480
atctttcctg agacagtgag aggatagcct tccacaaaca cgatgtatcg gggaatctta 540
aaatgggaaa tctttccttt gcagaaagct ttgatctcct cctccgtggt ggtctctccg 600
cctcgtgcca 610

<210> 97
<211> 1047
<212> DNA
<213> Rattus norvegicus

<400> 97
gtaacccacc tccattctgt tcttcggacg cttgcgccag tgggtcaatt ttattttctt 60
tcaaaaataa aagtcgagtg cattcagaga cggccttaag gcaatacgcc tcatcttccc 120
acagtaaaga tggcgacgcc gtgagtaagt tacaagtaac tccacttccg caattttctt 180
gagccctggt ccaagatggc ggacgaggcc acccggcggg tcgtgtctga gatcccggtg 240
ctgaagacta acgccggacc ccgagatcgg gaattgtggg tgcagcgact aaaggaggaa 300
tatcagtccc ttatccggta tgtcgaaaac aacaagaatg cggacaatga ttggttccga 360
ctggagtcca acaaggaagg gacccggtgg tttggaaaat gctggtacat ccacgacttc 420
ctcaaatacg agtttgacat cgagtttgaa attcctatca catatcccac tactgctcca 480
gaaattgcag tccctgagct ggatgggaaa acggcaaaga tgtacagggg tggcaaaata 540
tgtctaactg atcatttcaa acctttgtgg gccaggaatg tgcccaagtt tggactagct 600
cacctcatgg ccctggggct gggtccttgg ctggcagtgg aagtccctga tctgattcag 660
aagggtgtga tccagcacaa agaaaaatgc aaccaatgaa ggatgaagct tctgaggcag 720
gacagaggga ctgttgctag actctgattc tgtttcctcc tttctcatga ttccttcaag 780
ggtcacctct ggccattaca aagtagctgg agggacaaat aacaaaaccc aacaaaaggg 840
caaggtcaca aagttgctaa attaagctgt acagagaggt gaaagatttg ggccttgaaa 900
gaggcggttt gtatcccttc tccaagcaga gccctggagg cattttggag acctggggtg 960
taactgacag catatagctt tttgatttct ggagacaacc tgtcaataaa agctgcttcc 1020
catggtgtga aaaaaaaaaa aaaaaaa 1047

<210> 98
<211> 1191
<212> DNA
<213> Rattus norvegicus

<400> 98
tttgctatct gcacagccca tcgagggacc tgaggtggca aaccctggac agtgggtcag 60
gcggcgctca cgtctggggt gacaggatga agcgggctgt gggctgtgtg gagcaccgtg 120
cacccctagc acctttgggt ttcttgtgga gttctcgccc cagacatcag tgcactggat 180
tgcaaaaggc aattcatctt ttattggatc aggagcgcca tttggagtgt gccattatgg 240
gaggctcgta gctgtctgtc cctcgtgccg aattcggcac gagcccccct ttttttttt 300
ttttttttt ttttttttt ttttttttt tgaattagca caaacgcatt tatttactaa 360
ccaaaggaat gatcctgggt aaaccaacgg tctgacatgg gtttcgggta aagtgtctat 420

gatgaaaagt catgaaaaat aaaaccaaag aagtgaagca gtgtggttct gtacgacctg 480
ctcattgaat tgagcttatt ccctcagcca gctgactgct gtccaggatg acgagttagc 540
cagtcctcat tgtaccttct catagacccg agtacagatg gcattgttca tgacgcactc 600
caccaccatc ttcccgtcct tcagttttct cgttatcgtg ctttctttcc cttcccactt 660
ctggtgctgg accagggcac cgtctgtgaa ggtgcagacc gtctcagttt tcctgccatc 720
agctgtggtt tcatcaaact tctctcccaa ggtgcaagaa aacacggtcg tcttcaccgt 780
gctctcagtt ttgacggtga ggttgttgcc gtcgagggta atgatgcagt ctggtttggc 840
catggcaccc atcttcctaa gagccagccc tactcctagt tccttcatgt agtcctcaaa 900
cccgtggctt tccaccagac gccacttccc ttccaggtcc ttaaggctgg ccatggcgag 960
cgggagagca caaaagcagc aaggagacgc ggtggcgggg gcgctgaggg aataagctca 1020
attcaatgag caggtcgtac agaaccacac tgcttcactt ctttggtttt atttttcatg 1080
acttttcatc atagacactt tacccgaaac ccatgtcaga ccgttggttt acccaggatc 1140
attcctttgg ttagtaaata aatgcgtttg tgctaaaaaa aaaaaaaaaa a 1191

<210> 99
<211> 384
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<222> (1)..(1)
<223> Wherein n may be a, c, g or t

<400> 99
ncctagcaga acgcttgtta ggagtctgtg ggacaagata gcctctgata aaataaactc 60
taaacatgaa ctccttcaag aaaaaggact ggactccacc actgttcaat aaagtcacag 120
cgagggatgc tagaggcggt agacagaaat taagacattc tagatacggg gagtggccac 180
ttggttgggc caccacttgc cttagcatag gtaccatagg ctaagcatgg aaggcagtaa 240
gggtggatgt cattttaatg agagcagcaa atttagtaca tggtttatca aataaaaggt 300
aaaggagtcc aagatcaatc tgacaaatag atctatcagc tgaattgtaa tcttggggtg 360
gaggggtcag aggtccggca attg 384

<210> 100
<211> 181
<212> DNA
<213> Rattus norvegicus

<400> 100
caattgctgc tctaggatag tcagagtgtg ttctctgtct cctgggaaac agtggaccag 60
gaatgaaagc ttcaacctgg tacccagatt ttagatgttt tagggacaat cagtcaaatt 120
tttgtgtgaa tgtatgggtt tatatgacta taactgtgta agacagagaa atggatgtac 180
a 181

<210> 101
<211> 130
<212> DNA
<213> Rattus norvegicus

<400> 101
ccatggacat aactacctcc tgattaagtc cgttaattga gacctaatca gtctgttaga 60
ttattgaaac aggtcctgtt agcagactgc agggagaaaa cacggtcatg aaccaaagag 120
tgagtccgga 130

<210> 102
<211> 50
<212> DNA
<213> Rattus norvegicus

<400> 102
aagcttcctc catttcccag tagtgccata cgctggcaac cataggatcc 50

<210> 103

<211> 296
<212> DNA
<213> Rattus norvegicus

<400> 103
aagcttcaac tgtctattta ttcacagtca cactggctga gatgtcctac actgtgtcca 60
gtgcaagtgc tgacactgga cattgatgtc ttcttctgta tcttagagga aaggtcggta 120
gaggtagagc ctggcttccg gcttgtcata catgacccct aagtgattat ttctactgta 180
ccttattctc agaggaattt tatcatgaaa ggggtccagg agtctcccca caaaccttag 240
gaacaccaat ctcagtcaga cagggatgtt ttgaatgcac acctaaagtc tgatca 296

<210> 104
<211> 321
<212> DNA
<213> Rattus norvegicus

<400> 104
gctagccatt tggtatttat tagataacaa gttagggaac tcatgccttg gaaaggtgtt 60
gttggttgct tgtagttctt tgtctggcac agggaagcta cagctattat ctcaataaaa 120
tagctgtccc ttggattttt ttttttaaa taattgctta ttcgagccaa catctaaata 180
aggtgcatgc attgtatttg cttgatacgt ttgttgtgtc tctttttctt cttctgtaag 240
tttcttcccc tccttatttt tctttcctcg tattgtattt actggaaaaa ccagatcgcg 300
cgccctgcag gcttctgtac a 321

<210> 105
<211> 92
<212> DNA
<213> Rattus norvegicus

<400> 105
agatctgaaa gttaggcaaa atataagagc agccctctga agaggggacc tgccagctca 60
cttgggactc aacattctac tgtagagcta gc 92

<210> 106
<211> 94
<212> DNA
<213> Rattus norvegicus

<400> 106
agatcttggg gtttcaggct tgtttggcat tcaattttac cttctgagcc caggagcgag 60
aatcttgaac taaagagggc ttgacagtgc tagc 94

<210> 107
<211> 343
<212> DNA
<213> Rattus norvegicus

<400> 107
caattgaaca gtagtctgta agtagtgcaa cactgtaaaa tgttctcttt agttcagaga 60
gaaaattccc aagcattatt ccaactgctg ctaaaataga tgttataatt atcagtttaa 120
tgccagttcc aaacccctaa ataagcaaat attactgtta ttgccagcaa cttcctgaaa 180
ctacacaaat tcagtgtatc cctccctccc tcttttcctt tcagtcatga agggagcaga 240
tacaacccag ggtccaagat aggtaagtga tccttagatg attttagata gcaggtggtg 300
caaactttta atcccagcac ttgggaggta aacaggtgga tcc 343

<210> 108
<211> 238
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature
<222> (1)..(1)

<223> Wherein n may be a, c, g or t

<400> 108
nctaacaaag atggtttaga gatccaggtc accaatcctc ttctcagaca gacccatttc 60
tggggtcaac agccattact gcatgtagag taaagggaag taagacagag agagttcatg 120
ggcagtccta actggctgtg tggaaacagc tttccaattg ttctgggaat gaatgtagag 180
tcagtgtccc tgcatgggtc atgataagag tgcctgcaag tgaggcgctc acaagctt 238

<210> 109
<211> 247
<212> DNA
<213> Rattus norvegicus

<400> 109
ctcaggttgg ccttaaactc actatatact caaggatgag gttgaaccta tcttcctatc 60
tctgtctcct gagtgtactg ggattgtaca catgtgccac catacctggc ttacgtgatg 120
ttgtggatca aacccatggc tttatgtatg ctaagcaagc actttatcaa ctcaaccaca 180
attcatctct atattttaaa tgtaatattc ctaatatgtc tttacatttt ccagctacat 240
tcctagg 247

<210> 110
<211> 196
<212> DNA
<213> Rattus norvegicus

<400> 110
tgatcaagag tcccaaaccc agagagtctg gggtgctgac atctgaatgt ggctggcctg 60
ccctggctga ctgctttcag tgccagccac actgatgccc cttagccctc tggggttaat 120
ttaggaactt gggctcaggc caccgtcacc agcaatgaac tcacaaagaa tgagatgtgg 180
ctgttgattt cctagg 196

<210> 111
<211> 457
<212> DNA
<213> Rattus norvegicus

<400> 111
agatcttccg gagcaatggg gttcagcttt tgcagcgcct actggacacg ggagagactg 60
acctcatgct ggcagccctg cgcacactgg tcggcatttg ctctgagcac cagtctcgga 120
cagtggcgac cctgagtgtc ctaggaactc ggagagtcgt ctccatcctg ggtgtggaaa 180
accaggctgt gtcgctggca gcctgccacc tgctgcaggt tatgtttgat gccctcaagg 240
aaggtgtcaa gaaaggcttc cgaggcaaag aaggtgccat tatcgtggat cctgcccggg 300
agctgaaggt tctcatcagt aacctcttgg agcttctgac tgagatgggg gtctctggcc 360
aaggccggga caatgccctg accctcctca ttaaaatggt acctcggaag tcaccgaaag 420
atcccaacaa cagcctcaca ctctgggtca ttgatca 457

<210> 112
<211> 85
<212> DNA
<213> Rattus norvegicus

<400> 112
gctagcttaa gggttcttct gtaggccgcc tcatttcctg gtttaatttt actttatgta 60
tatgatgttg cctggatgta gatct 85

<210> 113
<211> 241
<212> DNA
<213> Rattus norvegicus

<400> 113
agatcttttt tgcttccctt ccttttattg atccttagga ataaatcctc ccaaactctg 60
ttgtttttaa agtttttga aagacctgat ttttttttcca ttttctttgc ccttgcaaat 120

aaccatcagt gtaattagtt gtccatgctg caagggaata ctttgtgagg gaaataagca 180
agaattgagt gttgtttact aagaggtcac gcggatggtt tttgggtaat tatttactag 240
t 241

<210> 114
<211> 388
<212> DNA
<213> Rattus norvegicus

<400> 114
tccggagctg gggactgaac ccagggcctt gtgcttccta ggcaagcgct ctaccactga 60
gctaaatccc caaccccgtc aaaggccatt tttatcctca tcaaacaatt ataccttact 120
ttttgagttg gaaatgtaat tcagtaatag tctgttttcc tagtatgtac aaagtcttgg 180
gctccctcac taacaccaaa ggaaagggga aaaaagagct cacttctttg actttcagtg 240
gccttccact cagactatgc ttgtttagaa cttcggcagc ttttttcatg ctctcctcca 300
tcttgaactc aacaacacta taaaaaagaa aagccaaaaa caaatgaata aaaccagtct 360
tacttggaaa attgaacttg gaaaattt 388

<210> 115
<211> 444
<212> DNA
<213> Rattus norvegicus

<400> 115
tctagagaaa tatacataga cagcaaggct ggagttgagc caggcaacct aagctgggcc 60
accggagtca ggcagctgca gaaggtcacg tgagcaggcc cagtgctagc ctgtgacgga 120
gtgatgtaga cactcagcca caccagggag ccaatctcca agttgtcttg gctagactgt 180
ggactctgcc cttcatgggt ctgccacaca ggcattctgg aactgtctag ctagctcttg 240
gggaaacagc taaaaggact ttggcttttc tggggtttgc agggagggta acagtgtctg 300
cgcccttgtt ctctacttct gaatgtagta acctcaccct ctggggtagc atatgacagg 360
tacccaactc cttttcgtgg gcaagcctct ggcaggggag ctctttctgt tgcaatgtaa 420
cagaggcatt gcctctttca attg 444

<210> 116
<211> 135
<212> DNA
<213> Rattus norvegicus

<400> 116
gtgcacagaa gtatgtgttc tgggtcggag gaaagatggt aggtgtttgt cccaacacag 60
tgaaaaggaa cagacatgtg aagtcttcag actgtgggcc tttgatttac ccctcagttg 120
gtctatgtgt gtaca 135

<210> 117
<211> 246
<212> DNA
<213> Rattus norvegicus

<400> 117
caattgcatt gcaaaatttt aaaggttaca ttgaaaacac ttgaaaataa gccaccaata 60
aatgagatga cgataataag agcccctaaa taaagaggct aagaaggagt taagtgtaaa 120
ggaagaggga agaaatagtt aaggcattta taagacacta gaaagtctag aagagagaat 180
gttagcagta cggagtcaca gctaaaaatc tgcatcttgc cctttaaaac ccaagagaga 240
aagctt 246

<210> 118
<211> 203
<212> DNA
<213> Rattus norvegicus

<400> 118
agatctgctg gtgtttgcct ccacagtggt gaggttgcat gtacatgccg accatgctcc 60
tatctttcac atgagtgctg tggaatgctc aggtcttagt gcttgtacaa gcaccttact 120

caactgaacc attgtcttag cccaatagtg aaacactgaa aagttatttt acccatgatc 180
agaagcttta acaatcaact agt 203

<210> 119
<211> 233
<212> DNA
<213> Rattus norvegicus

<400> 119
cctaggtctg ccagtgaata agaagacccc tccccggaaa gtcccgagtt tatgttccat 60
gcgctattca atagccttca tcgcacatat ctgcaacttc acattgatag cacagaattc 120
catcataagc atcaccatgg tagccatggt caacaacacg gaccagccat cccacctcaa 180
tagctctact gaatggtttc ctgatggttt aaacggtgat caacatgaag ctt 233

<210> 120
<211> 300
<212> DNA
<213> Rattus norvegicus

<400> 120
tgtacacagg tagtcttagg atttctgttg ctgaaaccgt gggaagggaa cagttcaatg 60
agtaaaacca agacagaagt caacctggtt agaagctgga ggcaggagaa gatgcagagg 120
ctgtggaggg gtgctgctta ctggcttgct ccccatggct tattcctgct ttcttataga 180
acccaggacc accggcccaa gggttacacc atctgtggtg atctgggccc tcctccatca 240
accactaatt aagaaagtgt ccaagtttgg ctatatctta cagagatgtt ttctcaattg 300

<210> 121
<211> 351
<212> DNA
<213> Rattus norvegicus

<400> 121
cctagggaat ttgccattgt ttagtttaag ctaacactcc aaaggtaatc tcctatttcc 60
tcttttcctt tctgtcctcc atgtggctgt catgggcatg cagcatacca gttctcaggt 120
gcctggaaca ctggccagtg ctctagccca gccactgtgc cctgaaatcc ttccctgtgt 180
tcaatgctac agcacatcct ccagactgcc tccccacccc cagcaaccga attgagcagg 240
gacactaaga cagtcctttg gagacttcca ctggtctgtt gaaactttgg ctgctctcac 300
agcatagctc ctcttagcct gtaacttagt gctgctcagg ctgactgatc a 351

<210> 122
<211> 889
<212> DNA
<213> Rattus norvegicus

<400> 122
ttttttttt ttttttaag gggccaagca gaagacaagc tgcctttatt atagttgatg 60
tcacagctct gcttgtaata gattcagccc cagaaacacc ccggttaaaa cagcacggtt 120
gacttcaatg gatagagtct ttggtaaggt gaaccagacc agggctgacc gacaatcttc 180
gggcccctgg cccaggggta gcctgtagtc ttacgtgagg cccagcatgg cctgaagttc 240
ccgagcttta tcatctggca gagagcccag ggctgtgtgg aagctgtcgc tgtgctgctt 300
ggccaggaac gtcagtagta gtagcagtgc ggccttggtg tctgggggga tcctgttgtc 360
tggcaggatc aggctgcaga tgcgcaggag ctctgaagcc acacccacaa cctggtcagg 420
gttgttctgg tgcaggaagc tgaagaggtg acctatagtg acccattcct ccatgtcttc 480
cttcaggggc agggcatgta gcagggtagc tagcacctgg ggctctgttt ttcctgccgg 540
actggccatc agcagacggg caagagcccc acagatgtta tcacggactc gatcatgccg 600
ctcccttgcc aggaggggca aaaggaggcc cagtagctta gggaagtggt cctgagcagg 660
gcagccccca tgctctgcaa gtacgcccag cccaaagatg gcattgctcc gcacctcggg 720
gtctgcttcc cgggcattgt ttaacagcac aggaaacagc cgggacacaa attgggctga 780
ggcagcacct agaccctgaa tggattctgc cagtgtcccc actgcaaagg acttctctgc 840
cactgtacag ctctgtttcg tcttacacag caataatggc aacctcgtg 889

<210> 123
<211> 310

<212> DNA
<213> Rattus norvegicus

<400> 123
tgatcaaggg cgacacatct ggagactata agaaggccct gctgctcctc tgtggaggcg 60
aggatgactg aggagctgcc tggagtgccc tgggcccgcc tgctgcccac catcagcttc 120
cttcagcacc acgcctactt acgttcaatg cctgcctgcc tgccacgctg ccttactcac 180
acgagtgtgt gctaatgacc aaagctgtct cgaatgaaag cagtgttctg ctgttctgtc 240
tgacatagac cttcccacgt ctctcagtct agtatctcta agttgcgttt tctatcctct 300
tctaaagctt 310

<210> 124
<211> 1733
<212> DNA
<213> Rattus norvegicus

<400> 124
aagctctggt tgcttgacat tgttgtacat atagggtctc gagcccctta gagctcgtcc 60
agttctttct ctgattcctt caacgggggt cctattctca gttcagtggt ttgctgctgg 120
cattcacctc tgtatttgct gtattctggc tgtgtctctc aggagagatc tacatccggc 180
tcctgttggt ctgcacttct ttgcttcatc catcttgtct aattgggtgg ctgtatatgt 240
atgggccaca tgtggggcag gctctgaatg ggtgttcctt ctgcctctgt tttaatcttt 300
gcctctctct tccctgccaa gggtattctt gttccccttt taaagaagga gtgaagcatt 360
cacattttga tcatccgtct tgagtttcat ttgttctgtg catctagggt aattcaagca 420
tttgggctaa tagccactta tcaatgagtg cataccatgt atgtctttct gtgattgggt 480
tagctcactc aggatgatat tttccagttc caaccatttg cctacgaatt tcataaactc 540
gttgtttttg atagctgagt aatattccat tgtgtagatg taccacattt tctgtatcca 600
ttcctctgtt gaagggcatc tgggttcttt ccagcttctg gctattataa ataaggctgc 660
aatgaacata gtggagcacg tgtctctttt atatgttggg gcatcttttg ggtatatgcc 720
caagagaggt atagctggat cctcaggcag ttcaatgtcc aattttctga ggaacctcca 780
gactgatttc cagaatggtt gtaccagttt gcaatcccac caacaatgga ggagtgttcc 840
tctttctcca catcctcgcc agcatctgtt gtcccctgag tttttgatca tagccattct 900
cactggtgtg aggtgaaatc tcacggttgt tttgatttgc atttccctta tgactaaaga 960
tgttgaacat ttctttaggt gtttctcagc catttggcat tcctcagctg tgaattcttt 1020
gtttagctct gaaccccatt ttttaatagg gttatttgtt tccctgcggt ctaacttctt 1080
gagttctttg tatattttgg atataaggcc tctatctgtt gtaggattgg taaagatatt 1140
ttcccaatct gttggttgcc gttttgtcct aaccacagtg tcctttgcct tacagaagct 1200
ttgcagtttt atgagatccc atttgtcgat tcttgatctt agagcataag ccattggtgt 1260
tttgttcagg aaatttttc cagtgcccat gtgttccaga tgcttcccta gtttttcttc 1320
tattagtttg agtgtgtctg gtttgatgtg gaggtccttg atccacttgg acttaagctt 1380
tgtacagggt gataagcatg gatcgatctg cattcttcta catgttgccc tccagttgaa 1440
ccagcaccat ttgctgaaaa tgctatcttt tttccattgg atggttttgg ctcctttgtc 1500
aaaaatcaag tgaccatagg tgtgtgggtt catttctggg tcttcagttc tattccattg 1560
gtctatctgt ctgtctctgt accaatcacc atgcagtttt tatcactatt gctctgtaat 1620
actgcttgag ttcagggata gtgattcccc ctgaagtcct tttattgttg aggatagctt 1680
tagctatcct gggtttttg ttattccaga tgaatttgca aattgttctg tct 1733

<210> 125
<211> 350
<212> DNA
<213> Rattus norvegicus

<400> 125
tgatcacgct cagcccttgg taggacattc tacagagtct cttgctgccc ctccgtctgt 60
gccagtggta ccacacgggg cagcctccgt ggaagtttct agttcacagt atgcagctca 120
gagtgaaagt gtggtgcatc aagactccag tgtccctgga atgccagtac aaactccagg 180
cccagtccaa ggacagaatt acagtgtctg ggattcaaac caacagtctg tcagtgtaca 240
gccccagtat tctcctgccc aatctcaagc aaccatatat taccaaggac agacatgttc 300
aactgtctac ggtgtgacct ctccttattc acagacaact cctccaattg 350

<210> 126
<211> 254
<212> DNA

<213> Rattus norvegicus

<400> 126
gctagcatcg tgatggccaa gtgcatccct gtgctttttt cttttctaag aaagattgaa 60
aaccaacagt tcttccccaa cagctgccta aattttaagg ggtctgaccc ttacatttca 120
attgggggaa tgaaggggggc ccaaccggct taattgctgt gggagagtga gtctggatgt 180
ctgagagagc accttgggag ggactcttcc tgcaatgctg taaatacgag taccgtttta 240
ataaagcatg taca 254

<210> 127
<211> 1063
<212> DNA
<213> Rattus norvegicus

<400> 127
ttttttttt ttttttggc tcctgccatc ttttttattg gtctgggctg tgggctgggg 60
gaggcaggtg ggctcacatc tttatgcaag cagcaaggag acggttcaca tgctcaggag 120
actccaggaa ggccttgagc ttgggtcggg ctttgagacg cgctacatag gcggagagca 180
gggggaagtc tttcaagtaa ccagggaaca ggagctctag gttcagaagt aaatccagta 240
ggcggtagtc ggcgaaggag atctggtcac caacaatgaa gcattggcca cccttgttct 300
gggccagaag agtttcaaat ggcttcaggt gtcctggaag ctccttccta tattggccct 360
tgtcctcctt acagatatgg agatagtgcc atgcaatgcg cctgaacacg tcttccagtc 420
cgtcgttcac catgtccacc agtgctgcct cttgctggtc tttgccgtag agcccgaagg 480
agtggcccag gtgccgtagg atggcattcg attggtacag agtgagcttt ccatcctgga 540
acttggggat ctgcccaaac agacaggaag ccttgaatgt gccttgctcc caaacatcca 600
aggtcaccac ctcctccttc caactctggc cctggtcggc tagcagcatg cgcataacct 660
cacagcgccc agtgttgggg tgcaggatgg ggatgaggcc acagcgaaga gacccaccct 720
cagagcatcc tgggagagtt tgggagactg gaaagctgac aagtggacta aactagcttg 780
ggagcctcga agggagggaa aaaatgtggt ggtagaggcc atgtcctaac attatcttgg 840
caagccaaga cccagcccca ccggcacagg gaaggaggaa aagtgacaga cagtgtagct 900
gcctatggag gctaagaggt cagtcctggc cccaccaacc acaattgtag tcccgcccca 960
agtctcggtc ttgcccccaa cgtggtcttg gccacatccc tccagcacca gtgttgaggg 1020
ggccccagga gtgactatgg cttgtgccct tcatcttgaa aac 1063

<210> 128
<211> 374
<212> DNA
<213> Rattus norvegicus

<400> 128
gtgcaccagt acctgatgct gggagatgaa tggcttagcg ctgttctact tggaacatat 60
cactcctgcc agccgggcac taacaattat cacccaatcc aggacttaaa ctgtgataga 120
ctggctgatg tttgcctttg aatagagtgt cccaaaagat gggaccactg gtcagctgcc 180
atggactaga ttctccacct gttgggggca atctggtcac cttgctgccc aatccgacct 240
ggagccacca cagcacgagt gtcaagcact ggcagaagcc catgggtgga ggaaagacct 300
ctgcgactgg ctgattgacc cctgctgaaa gccgaggcta ccttgtccac agacgggaac 360
agttctcttc atga 374

<210> 129
<211> 5215
<212> DNA
<213> Rattus norvegicus

<400> 129
aagcaacctt aaaatgactg caccctccca gatttctttt acattaacta aaaagtctta 60
tcacacaatc tcataaaatt tatgtaattt catttaattt tagccacaaa tcatcaaaat 120
gacgaggatt ttgacagctt tcaaagtggt gaggacactg aagactggtt ttggctttac 180
caatgtgact gcacaccaaa aatggaaatt ttcaagacct ggcatcaggc tcctttctgt 240
caaggcacag acagcacaca ttgtcctgga agatggaact aagatgaaag gttactcctt 300
tggccatcca tcctctgttg ctggtgaagt ggtttttaat actggcctgg gagggtaccc 360
agaagctatt actgaccctg cctacaaagg acagattctc acaatggcca accctattat 420
tgggaatggt ggagctcctg atactacttc tctggatgaa ctgggactta gcaaatattt 480
ggagtctaat ggaatcaagg tttcaggttt gctggtgctg gattatagta aagactacaa 540

ccactggctg gctaccaaga gtttagggca atggctacag gaagaaaagg ttcctgcaat 600
ttatggagtg gacacaagaa tgctgactaa aataattcgg gataagggta ccatgcttgg 660
gaagattgaa tttgaaggtc agcctgtgga ttttgtggat ccaaataaac agaatttgat 720
tgctgaggtt tcaaccaagg atgtcaaagt gtacggcaaa ggaaacccca caaaagtggt 780
agctgtagac tgtgggatta aaaacaatgt aatccgcctg ctagtaaagc gaggagctga 840
agtgcactta gttccctgga accatgattt caccaagatg gagtatgatg ggattttgat 900
cgcgggagga ccggggaacc cagctcttgc agaaccacta attcagaatg ttcagaagat 960
tttggagagt gatcgcaagg agccattgtt tggaatcagt acaggaaact taataacagg 1020
attggctgct ggtgccaaaa cctacaagat gtccatggcc aacagagggc agaatcagcc 1080
tgttttgaat atcacaaaca aacaggcttt cattactgct cagaatcatt gctatgcctt 1140
ggacaacacc ctccctgctg gctggaaacc actttttgtg aatgtcaacg atcaaacaaa 1200
tgaggggatt atgcatgaga gcaaaccctt cttcgctgtg cagttccacc cagaggtcac 1260
cccggggcca atagacactg agtacctgtt tgattccttt ttctcactga taaagaaagg 1320
aaaagctacc accattacat cagtcttacc gaagccagca ctagttgcat ctcgggttga 1380
ggtttccaaa gtccttattc taggatcagg aggtctgtcc attggtcagg ctggagaatt 1440
tgattactca ggatctcaag ctgtaaaagc catgaaggaa gaaaatgtca aaactgttct 1500
gatgaaccca aacattgcat cagtccagac caatgaggtg ggcttaaagc aagcggatac 1560
tgtctacttt cttcccatca cccctcagtt tgtcacagag gtcatcaagg cagaacagcc 1620
agatgggtta attctgggca tgggtggcca gacagctctg aactgtggag tagaactatt 1680
caagagaggt gtgctcaagg aatatggtgt gaaagtcctg ggaacttcag ttgagtccat 1740
tatggctacg gaagacaggc agctgttttc agataaacta aatgagatca atgaaaagat 1800
tgctccaagt tttgcagtgg aatcgattga ggatgcactg aaggcagcag acaccattgg 1860
ctacccagtg atgatccgtt ccgcctatgc actgggtggg ttaggctcag gcatctgtcc 1920
caacagagag actttgatgg acctcagcac aaaggccttt gctatgacca accaaattct 1980
ggtggagaag tcagtgacag gttggaaaga aatagaatat gaagtggttc gagatgctga 2040
tgacaattgt gtcactgtct gtaacatgga aaatgttgat gccatgggtg ttcacacagg 2100
tgactcagtt gttgtggctc ctgcccagac actctccaat gccgagtttc agatgttgag 2160
acgtacttca atcaatgttg ttcgccactt gggcattgtg ggtgaatgca acattcagtt 2220
tgcccttcat cctacctcaa tggaatactg catcattgaa gtgaatgcca agatgtcccc 2280
gaactctgct ctggcctcca aaacgactgg ctacccattg gcattcattg ctgcaaagat 2340
tgccctagga atcccacttc caggaattaa gaacgtcgta tccgggaaga catcagcctg 2400
ttttgaacct agcctggatt acatggtcac caagattccc cgctgggatc ttgaccgttt 2460
tcatggaaca tctagccgaa ttggtagctc tatgaaaagt gtaggagagg tcatggctat 2520
tggtcgtacc tttgaggaga gtttccagaa agctttacgg atgtgccacc catctataga 2580
gggtttcact ccccgtctcc caatgaacaa agaatggcca tcgaatttag atcttagaaa 2640
agagttgtct gaaccaagca gcacgcgtat ctatgccatt gccaaggcca ttgatgacaa 2700
catgtccctt gatgagattg agaagctcac atacattgac aagtggtttt tgtataagat 2760
gcgtgatatt ttaaacatgg aaaagacact gaaaggcctc aacagtgagt ccatgacaga 2820
agaaaccctg aaaagggcaa aggagattgg gttctcagat aagcagattt caaaatgcct 2880
tgggctcact gaggcccaga caagggagct gaggttaaag aaaaacatcc acccttgggt 2940
taaacagatt gatacactgg ctgcagaata cccatcagta acaaactatc tctatgttac 3000
ctacaatggt caggagcatg atgtcaattt tgatgaccat ggaatgatgg tgctaggctg 3060
tggtccatat cacattggca gcagtgtgga atttgattgg tgtgctgtct ctagtatccg 3120
cacactgcgt caacttggca agaagacggt ggtggtgaat tgcaatcctg agactgtgag 3180
cacagacttt gatgagtgtg acaaactgta ctttgaagag ttgtccttgg agagaatcct 3240
agacatctac catcaggagg catgtggtgg ctgcatcata tcagttggag gccagattcc 3300
aaacaacctg gcagttcctc tatacaagaa tggtgtcaag atcatgggca caagcccccc 3360
gcagatcgac agggctgagg atcgctccat cttctcagct gtcttggatg agctgaaggt 3420
ggctcaggca ccttggaaag ctgttaatac tttgaatgaa gcactggaat ttgcaaagtc 3480
tgtggactac ccctgcttgt tgaggccttc ctatgttttg agtgggtctg ctatgaatgt 3540
ggtattctct gaggatgaga tgaaaaaatt cctagaagag gcgactagag tttctcaggc 3600
cacgccagtg gtgctgacaa aatttgttga aggggcccga gaagtagaaa tggacgctgt 3660
tggcaaagat ggaagggtta tctctcatgc catctctgaa catgttgaag atgcaggtgt 3720
ccactcggag aatgccactc tgatgctgcc cacacaaacc atcagccaag gggccattga 3780
aaaggtgaag gatgctaccc ggaagattgc aaaggctttt gccatctctg gtccattcaa 3840
cgtccaattt cttgtcaaag gaaatgatgt cttggtgaat gagtgtaact tgagagcttc 3900
tcgatccttc ccctctgttt ccaagactct tggggttgac ttcattgatg tggccaccaa 3960
ggtgttgatt ggagagaatg ttgatgagaa acatcttcca acattggacc atcccataat 4020
tcctgttgac tatgttgcaa ttaaggctcc catgttttcc tggccccggt tgagggatgc 4080
tgaccccatt ctgagatgtg agatggcttc cactggagag gtggcttgct ttggtgaagg 4140
tattcataca gccttcctaa aggcaatgct ttccacagga tttaagatac cccagaaagg 4200
catcctgata ggcatccagc aatcattccg gccaagattc cttggtgtgg ctgaacaatt 4260
acacaatgaa ggtttcaagc tgtttgccac ggaagccaca tcagactggc tcaacgccaa 4320

caatgtccct gccaacccag tggcatggcc gtctcaagaa ggacagaatc ccagcctctc 4380
ttccatcaga aaattgatta gagatggcag cattgaccta gtgattaacc ttcccaacaa 4440
caacactaaa tttgtccatg ataattatgt gattcggagg acagctgttg atagtggaat 4500
ccctctcctc actaattttc aggtgaccaa acttttgct gaagctgtgc agaaatctcg 4560
caaggtggac tccaagagtc ttttccacta caggcagtac agtgctggaa aagcagcata 4620
gagatgcaga caccccagcc ccattattaa atcaacctga gccacatgtt atataaagga 4680
actgattcac aactttctca gagatgaata ttgataacta aacttcattt cagtttactt 4740
tgttatgcct taatattctg tgtcttttgc aattaaattg tcagtcactt cttcaaaacc 4800
ttacagtcct tcctaaggtt actcttcatg agattcatcc atttactaat actgtatttt 4860
tggtggacta ggcttgccta tgtgcttatg tgtagctttt tacttttttat ggtgtgatta 4920
atggtgatca aggtaggaaa agttgtgttc tattttcttg aactccttct atactttaag 4980
atactctatt tttaaaacac tatctgcaaa ctcaggacac tttaacaggg cagaatactc 5040
taaaaacttg ataaaattaa atatagattt aatttatgaa ccttccatca tgtgtttgtg 5100
tattgcttct ttttggatcc tcattctcac ccatttggct aatccaggaa tattgttatc 5160
ccttcccatt atattgaagt tgagaaatgt gacagagcat ttagagtatg aattc 5215

<210> 130
<211> 1857
<212> DNA
<213> Rattus norvegicus

<400> 130
ctgatccggg ccgggcggga agtcgggtcc cgaggctccg gctcggcaga ccgggcggaa 60
agcagccgag cggccatgga gctgtgcggg ctggggctgc cccggccgcc catgctgctg 120
gcgctgctgt tggcgacact gctggcggcg atgttggcgc tgctgactca ggtggcgctg 180
gtggtgcagg tggcggaggc ggctcgggcc ccgagcgtct cggccaagcc ggggccggcg 240
ctgtggcccc tgccgctctc ggtgaagatg accccgaacc tgctgcatct cgccccggag 300
aacttctaca tcagccacag ccccaattcc acggcgggcc cctcctgcac cctgctggag 360
gaagcgtttc gacgatatca tggctatatt tttggtttct acaagtggca tcatgaacct 420
gctgaattcc aggctaaaac ccaggttcag caacttcttg tctcaatcac ccttcagtca 480
gagtgtgatg ctttccccaa catatcttca gatgagtctt atactttact tgtgaaagaa 540
ccagtggctg tccttaaggc caacagagtt tggggagcat tacgaggttt agagaccttt 600
agccagttag tttatcaaga ttcttatgga actttcacca tcaatgaatc caccattatt 660
gattctccaa ggttttctca cagaggaatt ttgattgata catccagaca ttatctgcca 720
gttaagatta ttcttaaaac tctggatgcc atggctttta ataagtttaa tgttcttcac 780
tggcacatag ttgatgacca gtctttccca tatcagagca tcacttttcc tgagttaagc 840
aataaaggaa gctattcttt gtctcatgtt tatacaccaa atgatgtccg tatggtgatt 900
gaatatgcca gattacgagg aattcgagtc ctgccagaat ttgatacccc tgggcataca 960
ctatcttggg gaaaaggtca gaaagacctc ctgactccat gttacagtag acaaaacaag 1020
ttggactctt ttggacctat aaaccctact ctgaatacaa catacagctt ccttactaca 1080
tttttcaaag aaattagtga ggtgtttcca gatcaattca ttcatttggg aggagatgaa 1140
gtggaattta aatgttggga atcaaatcca aaaattcaag atttcatgag gcaaaaaggc 1200
tttggcacag attttaagaa actagaatct ttctacattc aaaaggtttt ggatattatt 1260
gcaaccataa acaagggatc cattgtctgg caggaggttt ttgatgataa agcaaagctt 1320
gcgccgggca caatagttga agtatggaaa gacagcgcat atcctgagga actcagtaga 1380
gtcacagcat ctggcttccc tgtaatcctt tctgctcctt ggtacttaga tttgattagc 1440
tatggacaag attggaggaa atactataaa gtggaacctc ttgattttgg cggtactcag 1500
aaacagaaac aacttttcat tggtggagaa gcttgtctat ggggagaata tgtggatgca 1560
actaacctca ctccaagatt atggcctcgg gcaagtgctg ttggtgagag actctggagt 1620
tccaaagatg tcagagatat ggatgacgcc tatgacagac tgacaaggca ccgctgcagg 1680
atggtcgaac gtggaatagc tgcacaacct ctttatgctg gatattgtaa ccatgagaac 1740
atgtaaaaaa tggaggggaa aaaggccaca gcaatctgta ctacaatcaa ctttattttg 1800
aaatcatgta aaataagata ttagactttt ttgaataaaa tatttttatt gattgaa 1857

<210> 131
<211> 1137
<212> DNA
<213> Rattus norvegicus

<400> 131
ggtgccttat gcggtgattt taatgatagg tgtcatatat aggacggagt aatctgttta 60
cattctgttc ttctcgatgc actcacaagc gggtaactag gtgacaagaa aacaaagatc 120
ttattcaaaa gaggtcttac agcaacccaa cgtctcatct tcccatagta aagatgacgg 180

cgccttgagg taagctacag gcaacaccac ttccgcgttt ctcttgcgcc ctggtccaag 240
atggcggatg aagccacgcg acgtgttgtg tctgagatcc cggtgctgaa gactaacgcc 300
ggaccccgag atcgtgagtt gtgggtgcag cgactgaagg aggaatatca gtcccttatc 360
cggtatgtgg agaacaacaa gaatgctgac aacgattggt tccgactgga gtccaacaag 420
gaaggaactc ggtggtttgg aaaatgctgg tatatccatg acctcctgaa atatgagttt 480
gacatcgagt ttgacattcc tatcacatat cctactactg ccccagaaat tgcagttcct 540
gagctggatg gaaagacagc aaagatgtac aggggtggca aaatatgcct gacggatcat 600
ttcaaacctt tgtgggccag gaatgtgccc aaatttggac tagctcatct catggctctg 660
gggctgggtc catggctggc agtggaaatc cctgatctga ttcagaaggg cgtcatccac 720
cacaaagaga aatgcaacca atgaagaatc aagccactga ggcagggcag agggaccttt 780
gataggctac gatactattt tcctgtgcat cacacttaac tcatctaact gcttccccgg 840
acaccctcca cctctagttg ttactaagta gctgcagtag gcattgctgg ggaagaaaca 900
aacacacacc aaacagtact gctacttagt ttctaaggct gcacagggaa gggaaagact 960
gggctttgga caatctagag gtaatttata tccgccccca ggtggagcaa catgcgattc 1020
tggaggcacg ggggtaactg aaagtgagta catatagtct ttctggtttc tggagataac 1080
ccatcaataa aagctgcttc ctctggtaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 1137

<210> 132
<211> 1883
<212> DNA
<213> Rattus norvegicus

<400> 132
gtcccagtca gtccggaggc tgcggctgca gaagtaccgc tgcggagtaa ctgcaaagat 60
gctgtccgtg cgcgttgctg cggccgtggt ccgcgccctt cctcggcggg ccggactggt 120
ctccagaaat gctttgggtt catctttcat tgctgcaagg aacttccatg cctctaacac 180
tcatcttcaa aagactggga ctgctgagat gtcctctatt cttgaagagc gtattcttgg 240
agctgatacc tctgttgatc ttgaagaaac tgggcgtgtc ttaagtattg gtgatggtat 300
tgcccgcgta catgggctga ggaatgttca agcagaagaa atggtagagt tttcttcagg 360
cttaaagggt atgtccttga acttggaacc tgacaatgtt ggtgttgtcg tgtttggaaa 420
tgataaacta attaaggaag gagatatagt gaagaggaca ggagccattg tggacgttcc 480
agttggtgag gagctgttgg gtcgtgtagt tgatgccctt ggtaatgcta ttgatggaaa 540
gggtccaatt ggttccaaga cgcgtaggcg agttggtctg aaagcccccg gtatcattcc 600
tcgaatttca gtgcgggaac caatgcagac tggcattaag gctgtggata gcttggtgcc 660
aattggtcgt ggtcagcgtg aactgattat tggtgaccga cagactggga aaacctcaat 720
tgctattgac acaatcatta accagaaacg tttcaatgat ggatctgatg aaaagaagaa 780
gctgtactgt atttatgttg ctattggtca aaagagatcc actgttgccc agttggtgaa 840
gagacttaca gatgcagatg ccatgaagta caccattgtg gtgtcggcta cggcctcgga 900
tgctgcccca cttcagtacc tggctcctta ctctggctgt tccatgggag agtattttag 960
agacaatggc aaacatgctt tgatcatcta tgacgactta tccaaacagg ctgttgctta 1020
ccgtcagatg tctctgttgc tccgccgacc ccctggtcgt gaggcctatc ctggtgatgt 1080
gttctaccta cactcccggt tgctggagag agcagccaaa atgaacgatg cttttggtgg 1140
tggctccttg actgctttgc cagtcataga aacacaggct ggtgatgtgt ctgcttacat 1200
tccaacaaat gtcatttcca tcactgacgg acagatcttc ttggaaacag aattgttcta 1260
caaaggtatc cgccctgcaa ttaacgttgg tctgtctgta tctcgtgtcg gatccgctgc 1320
ccaaaccagg gctatgaagc aggtagcagg taccatgaag ctggaattgg ctcagtatcg 1380
tgaggttgct gcttttgccc agttcggttc tgacctcgat gctgccactc aacaactttt 1440
gagtcgtggc gtgcgtctaa ctgagttgct gaagcaagga cagtattctc ccatggctat 1500
tgaagaacaa gtggctgtta tctatgcggg tgtaagggga tatcttgata aactggagcc 1560
cagcaagatt acaaagtttg agaatgcttt cttgtctcat gtcgtcagcc agcaccaagc 1620
cttgttgggc actatcaggg ctgatggaaa gatctcagaa caatcagatg caaagctgaa 1680
agagattgta acaaatttct tggctggatt tgaagcttaa actcctgtgg attcacatca 1740
aataccagtt cagttttgtc attgttctag taaattagtt ccatttgtaa aagggttact 1800
ctcatactcc ttatgtacag aaatcacatg aaaaataaag gttccataat gcaaaaaaaa 1860
aaaaaaaaaa aaaaaaaaaa aaa 1883

<210> 133
<211> 3597
<212> DNA
<213> Rattus norvegicus

<400> 133
ggcgaatgga gcaggggcgc gcagataatt aaagatttac acacagctgg aagaaatcat 60

agagaagccg ggcgtggtgg ctcatgccta taatcccagc acttttggag gctgaggcgg 120
gcagatcact tgagatcagg agttcgagac cagcctggtg ccttggcatc tcccaatggg 180
gtggctttgc tctgggctcc tgttccctgt gagctgcctg gtcctgctgc aggtggcaag 240
ctctgggaac atgaaggtct tgcaggagcc cacctgcgtc tccgactaca tgagcatctc 300
tacttgcgag tggaagatga atggtcccac caattgcagc accgagctcc gcctgttgta 360
ccagctggtt tttctgctct ccgaagccca cacgtgtatc cctgagaaca acggaggcgc 420
ggggtgcgtg tgccacctgc tcatggatga cgtggtcagt gcggataact atacactgga 480
cctgtgggct gggcagcagc tgctgtggaa gggctccttc aagcccagcg agcatgtgaa 540
acccagggcc ccaggaaacc tgacagttca caccaatgtc tccgacactc tgctgctgac 600
ctggagcaac ccgtatcccc ctgacaatta cctgtataat catctcacct atgcagtcaa 660
catttggagt gaaaacgacc cggcagattt cagaatctat aacgtgacct acctagaacc 720
ctccctccgc atcgcagcca gcaccctgaa gtctgggatt tcctacaggg cacgggtgag 780
ggcctgggct cagtgctata acaccacctg gagtgagtgg agccccagca ccaagtggca 840
caactcctac agggagccct tcgagcagca cctcctgctg ggcgtcagcg tttcctgcat 900
tgtcatcctg gccgtctgcc tgttgtgcta tgtcagcatc accaagatta agaaagaatg 960
gtgggatcag attcccaacc cagcccgcag ccgcctcgtg gctataataa tccaggatgc 1020
tcaggggtca cagtgggaga agcggtcccg aggccaggaa ccagccaagt gcccacactg 1080
gaagaattgt cttaccaagc tcttgccctg ttttctggag cacaacatga aaagggatga 1140
agatcctcac aaggctgcca aagagatgcc tttccagggc tctggaaaat cagcatggtg 1200
cccagtggag atcagcaaga cagtcctctg gccagagagc atcagcgtgg tgcgatgtgt 1260
ggagttgttt gaggccccgg tggagtgtga ggaggaggag gaggtagagg aagaaaaagg 1320
gagcttctgt gcatcgcctg agagcagcag ggatgacttc caggagggaa gggagggcat 1380
tgtggcccgg ctaacagaga gcctgttcct ggacctgctc ggagaggaga atgggggctt 1440
ttgccagcag gacatggggg agtcatgcct tcttccacct tcgggaagta cgagtgctca 1500
catgccctgg gatgagttcc caagtgcagg gcccaaggag gcacctccct ggggcaagga 1560
gcagcctctc cacctggagc caagtcctcc tgccagcccg acccagagtc cagacaacct 1620
gacttgcaca gagacgcccc tcgtcatcgc aggcaaccct gcttaccgca gcttcagcaa 1680
ctccctgagc cagtcaccgt gtcccagaga gctgggtcca gacccactgc tggccagaca 1740
cctggaggaa gtagaacccg agatgccctg tgtcccccag ctctctgagc caaccactgt 1800
gccccaacct gagccagaaa cctgggagca gatcctccgc cgaaatgtcc tccagcatgg 1860
ggcagctgca gcccccgtct cggcccccac cagtggctat caggagtttg tacatgcggt 1920
ggagcagggt ggcacccagg ccagtgcggt ggtgggcttg ggtcccccag gagaggctgg 1980
ttacaaggcc ttctcaagcc tgcttgccag cagtgctgtg tccccagaga aatgtgggtt 2040
tggggctagc agtggggaag aggggtataa gcctttccaa gacctcattc ctggctgccc 2100
tggggaccct gccccagtcc ctgtcccctt gttcaccttt ggactggaca gggagccacc 2160
tcgcagtccg cagagctcac atctcccaag cagctcccca gagcacctgg gtctggagcc 2220
gggggaaaag gtagaggaca tgccaaagcc cccacttccc caggagcagg ccacagaccc 2280
ccttgtggac agcctgggca gtggcattgt ctactcagcc cttacctgcc acctgtgcgg 2340
ccacctgaaa cagtgtcatg gccaggagga tggtggccag acccctgtca tggccagtcc 2400
ttgctgtggc tgctgctgtg gagacaggtc ctcgcccctt acaaccccca tgagggcccc 2460
agacccctct ccaggtgggg ttccactgga ggccagtctg tgtccggcct ccctggcacc 2520
ctcgggcatc tcagagaaga gtaaatcctc atcatccttc catcctgccc ctggcaatgc 2580
tcagagctca agccagaccc ccaaaatcgt gaactttgtc tccgtgggac ccacatacat 2640
gagggtctct taggtgcatg tcctcttgtt gctgagtctg cagatgagga ctagggctta 2700
tccatgcctg ggaaatgcca cctcctggaa ggcagccagg ctggcagatt tccaaaagac 2760
ttgaagaacc atggtatgaa ggtgattggc cccactgacg ttggcctaac actgggctgc 2820
agagactgga ccccgcccag cattgggctg ggctcgccac atcccatgag agtagagggc 2880
actgggtcgc cgtgccccac ggcaggcccc tgcaggaaaa ctgaggccct tgggcacctc 2940
gacttgtgaa cgagttgttg gctgctccct ccacagcttc tgcagcagac tgtccctgtt 3000
gtaactgccc aaggcatgtt ttgcccacca gatcatggcc cacgtggagg cccacctgcc 3060
tctgtctcac tgaactagaa gccgagccta gaaactaaca cagccatcaa gggaatgact 3120
tgggcggcct tgggaaatcg atgagaaatt gaacttcagg gagggtggtc attgcctaga 3180
ggtgctcatt catttaacag agcttcctta ggttgatgct ggaggcagaa tcccggctgt 3240
caaggggtgt tcagttaagg ggagcaacag aggacatgaa aaattgctat gactaaagca 3300
gggacaattt gctgccaaac acccatgccc agctgtatgg ctgggggctc ctcgtatgca 3360
tggaaccccc agaataaata tgctcagcca ccctgtgggc cgggcaatcc agacagcagg 3420
cataaggcac cagttaccct gcatgttggc ccagacctca ggtgctaggg aaggcgggaa 3480
ccttgggttg agtaatgctc gtctgtgtgt tttagtttca tcacctgtta tctgtgtttg 3540
ctgaggagag tggaacagaa ggggtggagt tttgtataaa taaagtttct ttgtctc 3597

<210> 134
<211> 1569
<212> DNA

<213> Rattus norvegicus

<400> 134
gtttgacgat gagagtgatg gggaagaaga ggaggagctc atggatgagg atgtggaaga 60
agaggatgac tcagagatct cagggtacag cgtggagaat gccttcttcg atgagaagga 120
agacacctgt gctgccgtgg gggagatctc tgtgaacacc agtgtggcct tccttccata 180
catggaaagt gtctttgaag aagtatttaa actgctggag tgccctcacc tgaatgtgcg 240
gaaggcagcc catgaggctc tgggtcagtt ttgctgtgca ctgcacaagg cctgtcaaag 300
ctgcccctcg gaacccaaca ctgctgcttt gcaggctgcc ctggcccgag tcgtgccatc 360
ctacatgcag gcagtgaaca gggagcggga acgccaggtg gtgatggccg tgctggaggc 420
cctgacaggg gtgctccgca gctgtgggac cctcacactg aagccccctg ggcgcctcgc 480
tgagctctgt ggcgtgctca aggctgtgct gcagaggaag acagcctgtc aggatactga 540
cgaggaggag gaagaggaag atgatgatca ggctgaatac gacgccatgt tgctggagca 600
cgctggagag gccatccctg ccctggcagc cgcggctggg ggagactcct ttgccccatt 660
ctttgccggt ttcctgccat tattggtgtg caagacaaaa cagggctgca cagtggcaga 720
gaagtccttt gcagtgggga ccttggcaga gactattcag ggcctgggtg ctgcctcagc 780
ccagtttgtg tctcggctgc tccctgtgct gttgagcacc gcccaagagg cagaccccga 840
ggtgcgaagc aatgccatct tcgggatggg cgtgctggca gagcatgggg gccaccctgc 900
ccaggaacac ttccccaagc tgctggagct ccttttttccc ctcctggcgc gggagcgaca 960
tgatcgtgtc cgtgacaaca tctgtggggc acttgcccgc ctgttgatgg ccagtcccac 1020
caggaaacca gagccccagg tgctggctgc cctactgcat gccctgccac tgaaggagga 1080
cttggaggag tgggtcacca ttgggcgcct cttcagcttc ctgtaccaga gcagccctga 1140
ccaggttata gatgtggctc ccgagcttct gcgtatctgc agcctcattc tggctgacaa 1200
caagatccca ccagacacca aggccgcact gttgctgctc ctgacgttcc tggccaaaca 1260
gcacaccgac agctttcaag cagctctggg ctcactgcct gttgacaagg ctcaggagct 1320
ccaggctgta ctgggcctct cctagactgc aggctgcagc cagtccagag agaatagagc 1380
ctgcccaggc cttaagacca cctctcagcc cagttcagtt ctgccttacc aaagattctg 1440
agactcatac ccatttggag ccagccccac ttgctgcctt acagggctgt ccctgaggct 1500
ggatctgtta caaatgagtc atgacatcat actgtaataa aagcagcttg ttttctgctt 1560
gaacaatag 1569

<210> 135
<211> 3129
<212> DNA
<213> Rattus norvegicus

<400> 135
cccgcactaa agacgcttct tcccggcggg taggaatccc gccggcgagc cgaacagttc 60
cccgagcgca gcccgcggac caccacccgg ccgcacgggc cgcttttgtc ccccgcccgc 120
cgcttctgtc cgagaggccg cccgcgaggc gcatcctgac cgcgagcgtc gggtcccaga 180
gccgggcgcg gctggggccc gaggctagca tctctcggga gccgcaaggc gagagctgca 240
aagtttaatt agacacttca gaattttgat cacctaatgt tgatttcaga tgtaaaagtc 300
aagagaagac tctaaaaata gcaaagatgc ttttgagcca gaatgccttc atcttcagat 360
cacttaattt ggttctcatg gtgtatatca gcctcgtgtt tggtatttca tatgattcgc 420
ctgattacac agatgaatct tgcactttca agatatcatt gcgaaatttc cggtccatct 480
tatcatggga attaaaaaac cactccattg taccaactca ctatacattg ctgtatacaa 540
tcatgagtaa accagaagat ttgaaggtgg ttaagaactg tgcaaatacc acaagatcat 600
tttgtgacct cacagatgag tggagaagca cacacgaggc ctatgtcacc gtcctagaag 660
gattcagcgg gaacacaacg ttgttcagtt gctcacacaa tttctggctg gccatagaca 720
tgtcttttga accaccagag tttgagattg ttggttttac caaccacatt aatgtgatgg 780
tgaaatttcc atctattgtt gaggaagaat tacagtttga tttatctctc gtcattgaag 840
aacagtcaga gggaattgtt aagaagcata aacccgaaat aaaaggaaac atgagtggaa 900
atttcaccta tatcattgac aagttaattc caaacacgaa ctactgtgta tctgtttatt 960
tagagcacag tgatgagcaa gcagtaataa agtctccctt aaaatgcacc ctccttccac 1020
ctggccagga atcagaatca gcagaatctg ccaaaatagg aggaataatt actgtgtttt 1080
tgatagcatt ggtcttgaca agcaccatag tgacactgaa atggattggt tatatatgct 1140
taagaaatag cctccccaaa gtcttgaggc aaggtctcgc taagggctgg aatgcagtgg 1200
ctattcacag gtgcagtcat aatgcactac agtctgaaac tcctgagctc aaacagtcgt 1260
cctgcctaag cttccccagt agctgggatt acaagcgtgc atccctgtgc cccagtgatt 1320
aagttttatt atgtagaaaa taaagagcaa acagtacagc tgatatggac tctctctctc 1380
ttttttttt ttttaagaa ttttcataac tttttagcct ggccatttcc taacctgcca 1440
ccgttggaag ccatggatat ggtggaggtc atttacatca acagaaagaa gaaagtgtgg 1500
gattataatt atgatgatga aagtgatagc gatactgagg cagcgcccag gacaagtggc 1560

ggtggctata ccatgcatgg actgactgtc aggcctctgg gtcaggcctc tgccacctct 1620
acagaatccc agttgataga cccggagtcc gaggaggagc ctgacctgcc tgaggttgat 1680
gtggagctcc ccacgatgcc aaaggacagc cctcagcagt tggaactctt gagtgggccc 1740
tgtgagagga gaaagagtcc actccaggac ccttttcccg aagaggacta cagctccacg 1800
gaggggtctg ggggcagaat taccttcaat gtggacttaa actctgtgtt tttgagagtt 1860
cttgatgacg aggacagtga cgacttagaa gccccctctga tgctatcgtc tcatctggaa 1920
gagatggttg acccagagga tcctgataat gtgcaatcaa accatttgct ggccagcggg 1980
gaagggacac agccaacctt tcccagcccc tcttcagagg gcctgtggtc cgaagatgct 2040
ccatctgatc aaagtgacac ttctgagtca gatgttgacc ttggggatgg ttatataatg 2100
agatgactcc aaaactattg aatgaacttg gacagacaag cacctacagg gttctttgtc 2160
tctgcatcct aacttgctgc cttatcgtct gcaagtgttc tccaagggaa ggaggaggaa 2220
actgtggtgt tcctttcttc caggtgacat cacctatgca cattcccagt atggggacca 2280
tagtatcatt cagtgcattg tttacatatt caaagtggtg cactttgaag gaagcacatg 2340
tgcacctttc ctttacacta atgcacttag gatgtttctg catcatgtct accagggagc 2400
agggttcccc acagtttcag aggtggtcca ggaccctatg atatttctct tctttcgttc 2460
ttttttttt ttttttgaga cagagtctcg ttctgtcgcc caagctggag cgcaatggtg 2520
tgatcttggc tcactgcaac atccgcctcc cgggttcagg tgattctcct gcctcagcct 2580
ccctcgcaag tagctgggat tacaggcgcc tgccaccatg cctagcaaat ttttgtattt 2640
ttagtggaga caggatttta ccatgttggc caggctggtc tcgaactcct gacctcaagt 2700
gatctgccct cctcagcctc gtaaagtgct gggattacag gggtgagccg ctgtgcctgg 2760
ctggccctgt gatatttctg tgaaataaat tgggccaggg tgggagcagg gaaagaaaag 2820
gaaaatagta gcaagagctg caaagcaggc aggaagggag gaggagagcc aggtgagcag 2880
tggagagaag gggggccctg cacaaggaaa cagggaagag ccatcgaagt ttcagtcggt 2940
gagccttggg cacctcaccc atgtcacatc ctgtctcctg caattggaat tccaccttgt 3000
ccagccctcc ccagttaaag tggggaagac agactttagg atcacgtgtg tgactaatac 3060
agaaaggaaa catggcgtcg gggagaggga taaaacctga atgccatatt ttaagttaaa 3120
aaaaaaaaa 3129

<210> 136
<211> 2643
<212> DNA
<213> Rattus norvegicus

<400> 136
gccccggcgc cgccgccgcc cagaccggac gacaggccac ctcgtcggcg tccgcccgag 60
tccccgcctc gccgccaacg ccacaaccac cgcgcacggc cccctgactc cgtccagtat 120
tgatcgggag agccggagcg agctcttcgg ggagcagcga tgcgaccctc cgggacggcc 180
ggggcagcgc tcctggcgct gctggctgcg ctctgcccgg cgagtcgggc tctggaggaa 240
aagaaagttt gccaaggcac gagtaacaag ctcacgcagt tgggcacttt tgaagatcat 300
tttctcagcc tccagaggat gttcaataac tgtgaggtgg tccttgggaa tttggaaatt 360
acctatgtgc agaggaatta tgatctttcc ttcttaaaga ccatccagga ggtggctggt 420
tatgtcctca ttgccctcaa cacagtggag cgaattcctt tggaaaacct gcagatcatc 480
agaggaaata tgtactacga aaattcctat gccttagcag tcttatctaa ctatgatgca 540
aataaaaccg gactgaagga gctgcccatg agaaatttac aggaaatcct gcatggcgcc 600
gtgcggttca gcaacaaccc tgccctgtgc aacgtggaga gcatccagtg gcgggacata 660
gtcagcagtg actttctcag caacatgtcg atggacttcc agaaccacct gggcagctgc 720
caaaagtgtg atccaagctg tcccaatggg agctgctggg gtgcaggaga ggagaactgc 780
cagaaactga ccaaaatcat ctgtgcccag cagtgctccg ggcgctgccg tggcaagtcc 840
cccagtgact gctgccacaa ccagtgtgct gcaggctgca caggcccccg ggagagcgac 900
tgcctggtct gccgcaaatt ccgagacgaa gccacgtgca aggacacctg ccccccactc 960
atgctctaca accccaccac gtaccagatg gatgtgaacc ccgagggcaa atacagcttt 1020
ggtgccacct gcgtgaagaa gtgtccccgt aattatgtgg tgacagatca cggctcgtgc 1080
gtccgagcct gtggggccga cagctatgag atggaggaag acggcgtccg caagtgtaag 1140
aagtgcgaag ggccttgccg caaagtgtgt aacggaatag gtattggtga atttaaagac 1200
tcactctcca taaatgctac gaatattaaa cacttcaaaa actgcacctc catcagtggc 1260
gatctccaca tcctgccggt ggcatttagg ggtgactcct tcacacatac tcctcctctg 1320
gatccacagg aactggatat tctgaaaacc gtaaaggaaa tcacagggtt tttgctgatt 1380
caggcttggc ctgaaaacag gacggacctc catgcctttg agaacctaga aatcatacgc 1440
ggcaggacca agcaacatgg tcagttttct cttgcagtcg tcagcctgaa cataacatcc 1500
ttgggattac gctccctcaa ggagataagt gatggagatg tgataatttc aggaaacaaa 1560
aatttgtgct atgcaaatac aataaactgg aaaaaactgt ttgggacctc cggtcagaaa 1620
accaaaatta taagcaacag aggtgaaaac agctgcaagg ccacaggcca ggtctgccat 1680
gccttgtgct cccccgaggg ctgctggggc ccggagccca gggactgcgt ctcttgccgg 1740

aatgtcagcc gaggcaggga atgcgtggac aagtgcaacc ttctggaggg tgagccaagg 1800
gagtttgtgg agaactctga gtgcatacag tgccacccag agtgcctgcc tcaggccatg 1860
aacatcacct gcacaggacg gggaccagac aactgtatcc agtgtgccca ctacattgac 1920
ggcccccact gcgtcaagac ctgcccggca ggagtcatgg gagaaaacaa caccctggtc 1980
tggaagtacg cagacgccgg ccatgtgtgc cacctgtgcc atccaaactg cacctacgga 2040
tgcactgggc caggtcttga aggctgtcca acgaatggaa gctacatagt gtctcacttt 2100
ccaagatcat tctacaagat gtcagtgcac tgaaacatgc aggggcgtgt tgagtgtgga 2160
aggatcttga caagttgttt tgaagatagc attttgctaa gtccctgagg tcactggtcc 2220
tcaaagcggc atggcgcatg gcgtggctgg ttctgccaca tgccagctgt gtgacctctg 2280
agactccact tcttccgtgc tgaaaataaa gaaggagttt tactaaggac caaacaagat 2340
aatgaatgtg aaactgctcc atgaacccca aagaattatg cacatagatg cgatcattaa 2400
gatgcgaagc catcgagtta ccacctggca tgcttaaact gtaaagagtg ggtcaaagta 2460
aactgaattg gaaaatccaa agttatgcag aaaaacaata aaggagatag taaaaagggt 2520
taacgagcca gtccagggga agcgaagaag acaaaaagag tccttttctg ggccaagttt 2580
gataaattag gcctcccgac cctttgctct gttgctttat caactctact cggcaataac 2640
aat 2643

<210> 137
<211> 1514
<212> DNA
<213> Rattus norvegicus

<400> 137
gcccctccct ccgcccgccc gccggcccgc ccgtcagtct ggcaggcagg caggcaatcg 60
gtccgagtgg ctgtcggctc ttcagctctc ccgctcggcg tcttccttcc tcctcccggt 120
cagcgtcggc ggctgcaccg gcggcggcgc agtccctgcg ggaggggcga caagagctga 180
gcggcggccg ccgagcgtcg agctcagcgc ggcggaggcg gcggcggccc ggcagccaac 240
atggcggcgg cggcggcggc gggcgcgggc ccggagatgg tccgcgggca ggtgttcgac 300
gtggggccgc gctacaccaa cctctcgtac atcggcgagg gcgcctacgg catggtgtgc 360
tctgcttatg ataatgtcaa caaagttcga gtagctatca agaaaatcag ccccttgag 420
caccagacct actgccagag aaccctgagg gagataaaaa tcttactgcg cttcagacat 480
gagaacatca ttggaatcaa tgacattatt cgagcaccaa ccatcgagca aatgaaagat 540
gtatatatag tacaggacct catggaaaca gatctttaca agctcttgaa gacacaacac 600
ctcagcaatg accatatctg ctattttctc taccagatcc tcagagggtt aaaatatatc 660
cattcagcta acgttctgca ccgtgacctc aagccttcca acctgctgct caacaccacc 720
tgtgatctca agatctgtga ctttggcctg gcccgtgttg cagatccaga ccatgatcac 780
acagggttcc tgacagaata tgtggccaca cgttggtaca gggctccaga aattatgttg 840
aattccaagg gctacaccaa gtccattgat atttggtctg taggctgcat tctggcagaa 900
atgctttcta acaggcccat ctttccaggg aagcattatc ttgaccagct gaaccacatt 960
ttgggtattc ttggatcccc atcacaagaa gacctgaatt gtataataaa tttaaaagct 1020
aggaactatt tgctttctct tccacacaaa aataaggtgc catggaacag gctgttccca 1080
aatgctgact ccaaagctct ggacttattg gacaaaatgt tgacattcaa cccacacaag 1140
aggattgaag tagaacaggc tctggcccac ccatatctgg agcagtatta cgacccgagt 1200
gacgagccca tcgccgaagc accattcaag ttcgacatgg aattggatga cttgcctaag 1260
gaaaagctca aagaactaat ttttgaagag actgctagat tccagccagg atacagatct 1320
taaatttgtc aggtacctgg agtttaatac agtgagctct agcaagggag gcgctgcctt 1380
ttgtttctag aatattatgt tcctcaaggt ccattatttt gtattctttt ccaagctcct 1440
tattggaagg tatttttta aatttagaat taaaaattat ttagaaaaaa aaaaaaaaaa 1500
aaaaaaaaaa aaaa 1514

<210> 138
<211> 2890
<212> DNA
<213> Rattus norvegicus

<400> 138
ggcacgaggg tggcctctgc ggctaggccg gctcgagact cccgggcgcc gaggcgctgc 60
cgcccgcctc gccgccccac gccgaaggac cacgcgcccg ccgccgccag cctctcagcg 120
ctcccatgat cgcccggtgc cttttggctg tgcgaagcct ccgcagagtt ggtggttcca 180
ggattttact cagaatgacg ttaggaagag aagtgatgtc tcctcttcag gcaatgtctt 240
cctatactgt ggctggcaga aatgttttaa gatgggatct ttcaccagag caaattaaaa 300
caagaactga ggagctcatt gtgcagacca aacaggtgta cgatgctgtt ggaatgctcg 360
gtattgagga agtaacttac gagaactgtc tgcaggcact ggcagatgta gaagtaaagt 420

atatagtgga aaggaccatg ctagactttc cccagcatgt atcctctgac aaagaagtac 480
gagcagcaag tacagaagca gacaaaagac tttctcgttt tgatattgag atgagcatga 540
gaggagatat atttgagaga attgttcatt tacaggaaac ctgtgatctg gggaagataa 600
aacctgaggc cagacgatac ttggaaaagt caattaaaat ggggaaaaga aatgggctcc 660
atcttcctga acaagtacag aatgaaatca aatcaatgaa gaaaagaatg agtgagctat 720
gtattgattt taacaaaaac ctcaatgagg atgatacctt ccttgtattt tccaaggctg 780
aacttggtgc tcttcctgat gatttcattg acagtttaga aaagacagat gatgacaagt 840
ataaaattac cttaaaatat ccacactatt tccctgtcat gaagaaatgt tgtatccctg 900
aaaccagaag aaggatggaa atggctttta atacaaggtg caaagaggaa aacaccataa 960
ttttgcagca gctactccca ctgcgaacca aggtggccaa actactcggt tatagcacac 1020
atgctgactt cgtccttgaa atgaacactg caaagagcac aagccgcgta acagcctttc 1080
tagatgattt aagccagaag ttaaaaccct tgggtgaagc agaacgagag tttattttga 1140
atttgaagaa aaaggaatgc aaagacaggg gttttgaata tgatgggaaa atcaatgcct 1200
gggatctata ttactacatg actcagacag aggaactcaa gtattccata gaccaagagt 1260
tcctcaagga atacttccca attgaggtgg tcactgaagg cttgctgaac acctaccagg 1320
agttgttggg actttcattt gaacaaatga cagatgctca tgtttggaac aagagtgtta 1380
cactttatac tgtgaaggat aaagctacag gagaagtatt gggacagttc tatttggacc 1440
tctatccaag ggaaggaaaa tacaatcatg cggcctgctt cggtctccag cctggctgcc 1500
ttctgcctga tggaagccgg atgatggcag tggctgccct cgtggtgaac ttctcacagc 1560
cagtggcagg tcgtccctct ctcctgagac acgacgaggt gaggacttac tttcatgagt 1620
ttggtcacgt gatgcatcag atttgtgcac agactgattt tgcacgattt agcggaacaa 1680
atgtggaaac tgactttgta gaggtgccat cgcaaatgct tgaaaattgg gtgtgggacg 1740
tcgattccct ccgaagattg tcaaaacatt ataaagatgg aagccctatt gcagacgatc 1800
tgcttgaaaa acttgttgct tctaggctgg tcaacacagg tcttctgacc ctgcgccaga 1860
ttgttttgag caaagttgat cagtctcttc ataccaacac atcgctggat gctgcaagtg 1920
aatatgccaa atactgctca gaaatattag gagttgcagc tactccaggc acaaatatgc 1980
cagctacctt tggacatttg gcaggggggat acgatggcca atattatgga tatctttgga 2040
gtgaagtatt ttccatggat atgttttaca gctgttttaa aaaagaaggg ataatgaatc 2100
cagaggttgg aatgaaatac agaaacctaa tcctgaaacc tgggggatct ctggacggca 2160
tggacatgct ccacaatttc ttgaaacgtg agccaaacca aaaagcgttc ctaatgagta 2220
gaggcctgca tgctccgtga actggggatc tttggtagcc gtccatgtct ggaggacaag 2280
tcgacatcac catgtgttac tggcctggaa actgaaggga gttttgcaag tgaaaattta 2340
gatttctatt gacatccttt tgttttctaa ttttaaaaat tataaagatg taaatggaat 2400
tataaatact gtgacctaag aaaagaccca ctagaaagta attgtactat aaaatttcat 2460
aaaactggat ttgatttctt tttatgaaag tttcatatga atgtaacttg attttttact 2520
attataatct agataatatg atataagagg gctaagaatt tttaaattga atcatatata 2580
tgatataatt tgatccttct tgtatcttga agttttgtac ttgggatttc tggactgata 2640
aatgaatcat cacattcttc tggtaaatat tttcttggag ctctgtgtca actttgatcc 2700
tttgtctccc aggaaggtgt gacctctcct ttgcctgcat acctcaaggc caggggaata 2760
tgcctcagtg atgcatttat ctttgtatat caggccgcat gattcccaac tttctgccac 2820
acttaaatta cgttcctcca tttcagtttt gtcttttctg tctaaagttc agtcaaagag 2880
tatcaaaaaa 2890

<210> 139
<211> 1350
<212> DNA
<213> Rattus norvegicus

<400> 139
gcggccgcgt cgacgtgaca gccggtacgc ccgggtttgg gcaacctcga ttacgggcgg 60
cctccaggcc cgccagcagc gccccgcgcc gcccgcccgc gcccctgccg ccccccggtt 120
ccggccgcgg accccactct ctgccgttcc ggctgcggct ccgctgccgg tagcgccgtc 180
ccccgggacc acccttcggc tggcgccctc ccatgctctc ggccacccgg agggcttgcc 240
agctcctcct cctccacagc ctctttcccg tcccgaggat gggcaactcg gcctcgaaca 300
tcgtcagccc ccaggaggcc ttgccgggcc ggaaggaaca gacccctgta gcggccaaac 360
atcatgtcaa tggcaacaga acagtcgaac ctttcccaga gggaacacag atggctgtat 420
ttggaatggg atgtttctgg ggagctgaaa ggaaattctg ggtcttgaaa ggagtgtatt 480
caactcaagt tggttttgca ggaggctata cttcaaatcc tacttataaa gaagtctgct 540
cagaaaaaac tggccatgca gaagtcgtcc gagtggtgta ccagccagaa cacatgagtt 600
ttgaggaact gctcaaggtc ttctgggaga atcacgaccc gacccaaggt atgcgccagg 660
ggaacgacca tggcactcag taccgctcgg ccatctaccc gacctctgcc aagcaaatgg 720
aggcagccct gagctccaaa gagaactacc aaaaggttct ttcagagcac ggcttcggcc 780
ccatcactac cgacatccgg gagggacaga ctttctacta tgcggaagac taccaccagc 840

agtacctgag caagaacccc aatggctact gcggccttgg gggcaccggc gtgtcctgcc 900
cagtgggtat taaaaaataa ttgctcccca catggtgggc ctttgaggtt ccagtaaaaa 960
tgctttcaac aaattgggca atgcttgtgt gattcacaat cgtggcattt aaagtgcaca 1020
aagtacaaag gaatttatac agattgggtt taccgaagta taatctatag gaggcgcgat 1080
ggcaagttga taaaatgtga cttatctcct aataagttat ggtgggagtg gagctgtgcg 1140
gtttcctgtg tcttctgggg tctgagtgaa gatagcaggg atgctgtgtt caccttctt 1200
ggtagaagct aaggtgtgag ctgggaggtt gctggacagg atgggggacc ccagaagtcc 1260
tttatctgtg ctctctgccc gccagtgcct tacaatttgc aaacgtgtat agcctcagtg 1320
actcattcgc tgaaatcctt cgctttacca 1350

<210> 140
<211> 1825
<212> DNA
<213> Rattus norvegicus

<400> 140
gcaggctcag cgcatcccag ccagtgtctc ctgcagctca gcagctgcct tcaccatgga 60
cagcataagc acagccatct tactcctgct cctggctctc gtctgtctgc tcctgaccct 120
aagctcaaga gataagggaa agctgcctcc gggacccaga cccctctcaa tcctgggaaa 180
cctgctgctg ctttgctccc aagacatgct gacttctctc actaagctga gcaaggagta 240
tggctccatg tacacagtgc acctgggacc caggcgggtg gtggtcctca gcgggtacca 300
agctgtgaag gaggccctgg tggaccaggg agaggagttt agtggccgcg gtgactaccc 360
tgccttttc aactttacca agggcaatgg catcgccttc tccagtgggg atcgatggaa 420
ggtcctgaga cagttctcta tccagattct acggaatttc gggatgggga agagaagcat 480
tgaggagcga atcctagagg agggcagctt cctgctggcg gacgtgcgga aaactgaagg 540
cgagcccttt gaccccacgt ttgtgctgag tcgctcagtg tccaacatta tctgttccgt 600
gctcttcggc agccgcttcg actatgatga tgagcgtctg ctcaccatta tccgccttat 660
caatgacaac ttccaaatca tgagcagccc ctggggcgag ttgtacgaca tcctagaccc 720
cagattcccg agcctcctgg actgggtgcc tgggccgcac caacgcatct tccagaactt 780
caagtgcctg agagacctca tcgcccacag cgtccacgac caccaggcct cgtctccccg 840
ggacttcatc cagtgcttcc tcaccaagat ggcagaggag aaggaggacc cactgagcca 900
cttccacatg gataccctgc tgatgaccac acataacctg ctctttggcg gcaccaagac 960
ggtgagcacc acgctgcacc acgccttcct ggcactcatg aagtacccaa aagttcaagc 1020
ccgcgtgcag gaggagatcg acctcgtggt gggacgcgcg cggctgccgg cgctgaagga 1080
ccgcgcggcc atgccttaca cagacgcggt gatccacgag gtgcagcgct ttgcagacat 1140
catccccatg aacttgccgc accgcgtcac tagggacacg gcctttcgcg gcttcctgat 1200
acccaagggc accgatgtca tcaccctcct taacaccgtc cactacgacc ccagccagtt 1260
cctgacgccc caggagttca accccgagca ttttttggat gccaatcagt ccttcaagaa 1320
gagtccagcc ttcatgccct tctcagctgg gcgccgtctg tgcctgggag agctgctggc 1380
gcgcatggag ctctttctgt acctcaccgc catcctgcag agcttttcgc tgcagccgct 1440
gggtgcgccc gaggacatcg acctgacccc actcagctca ggtcttggca atttgccgcg 1500
gcctttccag ctgtgcctgc gcccgcgcta acgccccggc ccttccagat tcgcctgtga 1560
gcgatgaggc ccacccatgt gggttgctac gtccccttct tggtccacag tctgccctca 1620
tccctctggc agtcacgctg tcttccctgc atgctgtgcc tgccgcgtgc ccttccccca 1680
tccctccaat ctgtgccccg tctgcagggc agaggcagat gtggcatgtc tttttgtacc 1740
cacagagctt gttctatggc acgccctttt ctaggctttt tgtatcattt cttagtacat 1800
tgtaatagat tcaaaccagt cttgg 1825

<210> 141
<211> 1734
<212> DNA
<213> Rattus norvegicus

<400> 141
agttgctgtg gaggccctgg cacggctgca gcagggtgtg agcgccaccg ttgcccacct 60
tctggacctg gcaggcagcg ccggtgcgac tgggagctgg cgtagcccct ctgagccaca 120
ggagccgctg gtgcaggacc tgcaggctgc tgtggccgcc gtccagagtg ccgtccacga 180
gctgttggag tttgcccgca gcgcggtggg caatgctgcc cacacatctg accgtgccct 240
gcatgccaag cttagccggc agctgcagaa gatggaggac gtgcaccaga cgctggtggc 300
acatggtcag gccctcgacg ctggccgggg aggctctgga gccacccttg aggacctgga 360
ccggctggtg gcctgctcgc gggctgtgcc cgaggacgcc aagcagctgg cctccttcct 420
gcacggcaat gcctcactgc tcttcagacg gaccaaggcc actgccccgg ggcctgaggg 480
gggtggcacc ctgcacccca accccactga caagaccagc agcatccagt cacgacccct 540

gccctcaccc cctaagttca cctcccagga ctcgccagat gggcagtacg agaacagcga 600
gggggctgg atggaggact atgactacgt ccacctacag gggaaggagg agtttgagaa 660
gacccagaag gagctgctgg aaaagggcag catcacgcgg cagggcaaga gccagctgga 720
gttgcagcag ctgaagcagt ttgaacgact ggaacaggag gtgtcacggc ccatagacca 780
cgacctggcc aactggacgc cagcccaacc cctggccccg gggcgaacag gcggcctggg 840
gccctcggac cggcagctgc tgctcttcta cctggagcag tgtgaggcca acctgaccac 900
actgaccaac gccgtggacg ccttctttac cgccgtggcc accaaccagc cgcccaagat 960
ctttgtggcg cacagcaagt tcgtcatcct cagcgcccac aagctggtgt tcatcgggga 1020
cacactgtca cggcaggcca aggctgctga cgtgcgcagc caggtgaccc actacagcaa 1080
cctgctgtgc gacctcctgc gcggcatcgt ggccaccacc aaggccgctg ccttgcagta 1140
cccatcgcct tccgcggccc aggacatggt ggagagggtc aaggagctgg gccacagcac 1200
ccagcagttc cgccgcgtcc taggccagct ggcagccgcc tgagggtggt gaccccagga 1260
gggaggcagg ggaggggtgc ggcggtccca gctccctggc tcccatgtca agagtcgctg 1320
tgccacaggc ttagggacag gaccccagct ctgcgtcggt cctggtgccc tggatgccca 1380
ggaatctgta tatatttatg gccgggcagg gtgtggggcc atgcctcctc aggagccgaa 1440
gcccaggggc cggccagtgg ccttccccag catgcaccac gggcccgggt tgggtcacca 1500
gacggggctg gagtgtgagg gtcctgcagc ctgcaggacc tcgtgccacc ccgagggctg 1560
agcctggtcc cacgagggtg ccgtgtcccc tgacagggcc agtgcagttt ggtgtgtcct 1620
ccgcctttcc aggagaagaa cctgaagaac tatttttcgt tattggtttt ccaatcattt 1680
gactaagagt ctccatttaa ataaagtttt taaaaggaaa aaaaaaaaaa aaaa 1734

<210> 142
<211> 471
<212> DNA
<213> Rattus norvegicus

<400> 142
ttttttttttt ttttttgcc ggtcggagac tcccgtctgc caaggttttt attgtggtcc 60
cgcggggcag gaggtatgca tggcatacgt aagcagagag ccggaggcag ccatcggcac 120
ctagaacggt gcagagttgg cccaggagcg tggcggggca ggcggcctgc acctgccctg 180
ctcgcccagc agaccctccg ggctccagcc tggcggggcc cagcgtccac cttggtgggc 240
ccaggtcaga tcttggccag ggtggagtgg gcgtcggcct gctcctcttg gatgggggtc 300
cggaaactgc ctcccccagg gggcttgtgg gcatcggggg gcagcctctg gtccctccgg 360
agcaggtaca gggccagcag gatgggcagg gggcccagca gccccagcac caggcccagg 420
cccaggatgg ggggaaccgc acgggccccg gggacctcca cgggccgggt g 471

<210> 143
<211> 6217
<212> DNA
<213> Rattus norvegicus

<400> 143
cgctcccgcc ccagctcgcg ctgcccgggc gggcgccggc cgctggcgcc gctactgctg 60
ccgcccccgg ggcgcgagtc cgccgcccgc cgcccgggca cccggcgagg ggcgggggca 120
gctccgaacc ggccccagat ccttcccgct tccgcctcac gcttcccgga aagcttgtcc 180
ctctccgccg agctgctccg ggagccccgc cgcgccgagg gtatctccca gagccccagc 240
tggtgtggcc aggccccagg agtaggatgg ggctcccccct acgagggccg gtggcagcca 300
gaactgatac agccccccctg gtctggggcc aggacgccag ctgaggaggg caggagtgtc 360
tggagctatg gctggtgcct cggtgaaagt ggcagtgagg gttcggccct ttaacgcccg 420
tgagaccagc caggatgcca agtgtgtggt cagcatgcag ggcaacacca cctccatcat 480
caatcctaaa cagagcaagg atgcccccaa aagcttcacc tttgactact cctactggtc 540
acacacttcg acggaggacc cccagtttgc atctcagcag caagtgtatc gggacattgg 600
agaagagatg ctgctccacg cctttgaagg ctacaacgtg tgcatctttg cctatgggca 660
gaccggggct gggaaatcct ataccatgat ggggcgacag gagccagggc agcagggcat 720
cgtgccccag ctctgtgagg acctcttctc tcgcgttagt gagaaccaga gtgctcagct 780
atcctactct gtggaggtga gctatatgga gatctactgt gagcgggtac gagacctctt 840
gaaccccaag agtcggggtt ctctgcgggt ccgggagcac cccatcctgg gcccgtacgt 900
gcaggacctg tccaaattgg ctgtgacctc ctacgcagac attgctgacc tcatggactg 960
tggaaataaa gcacggactg tggctgccac caacatgaat gagaccagca gccgttccca 1020
tgccgtcttt accatcgtct tcacacagcg ctgccatgac cagctcacgg ggctggactc 1080
ggagaaggtc agtaagatca gtttggtgga ccttgctggg agtgagcgag ccgactcctc 1140
aggggcccgg ggcatgcgcc tgaaggaagg agccaacatc aataagtccc tgactacact 1200
agggaaagtg atctcggccc ttgcagatat gcaatcaaag aagcgaaagt cggattttat 1260

ccctacagg gactctgtgc tcacctggct gctcaaggaa aatttggggg ggaactcacg 1320
cacagccatg attgcagccc tgagccctgc tgacatcaat tacgaggaga ctctcagcac 1380
cctcaggtat gctgaccgca ccaagcaaat ccgctgcaat gccatcatca acgaggaccc 1440
taatgcccgg ctgattagag agctgcagga ggaagtagcc cggctgcggg aactgctgat 1500
ggctcaggga ctgtcagcct ctgctctgga aggcctgaag acggaagaag ggagtgtcag 1560
aggcgccctg ccagctgtgt catctcccc agctccagtt tcaccctcat cacccaccac 1620
acataatggg gagctggagc cgtcattctc ccccaacacg gagtcccaga ttgggcctga 1680
ggaagccatg gagaggctgc aggagacaga gaagattata gctgagctga acgagacatg 1740
ggaggagaag ctacgcaaga cagaagccct gaggatggag agagaagcat tgctggctga 1800
gatgggggtg gccgtccggg aggatggggg aactgtgggc gtcttctctc caaagaagac 1860
tccccacctg gtgaacctga acgaagaccc tctgatgtct gagtgtctgc tctaccacat 1920
caaagatggc gtcaccaggg tcggccaagt agatatggac atcaagctga ccggacagtt 1980
cattcgggag caacactgtc tgttccggag catcccccag ccagatggag aagtggtggt 2040
cactctggag ccttgtgaag gagctgagac atatgtgaat gggaagcttg tgacggagcc 2100
gctggtgctg aagtcaggga ataggattgt gatgggcaag aaccacgttt tccgcttcaa 2160
ccacccggag caggcaaggc tggaacggga acgaggggtc cccccacccc caggaccgcc 2220
ctctgagcca gtcgactgga actttgccca gaaggaactg ctggagcagc aaggcatcga 2280
cataaagctg gaaatggaga agaggctgca ggatctggag aatcagtacc ggaaagaaaa 2340
ggaagaagcc gatcttctgc tggagcagca gcgactgtat gcagactcgg acagcgggga 2400
tgactctgac aagcgctctt gtgaagagag ctggaggctc atctcctcct tgcgggagca 2460
gctgccgccc accacggtcc agaccattgt caaacgctgt ggtctgccca gcagtggcaa 2520
gcgcagggcc cctcgcaggg tttatcagat cccccagcga cgcaggctgc agggcaaaga 2580
cccccgctgg gccaccatgg ctgacctgaa gatgcaggcg gtgaaggaga tctgctacga 2640
ggtggccctg gctgacttcc gccacgggcg ggctgagatt gaggccctgg ccgccctcaa 2700
gatgcgggag ctgtgtcgca cctatggcaa gccagacggc cccggagacg cctggagggc 2760
tgtggcccgg gatgtctggg acactgtagg cgaggaggaa ggaggtggag ctggcagtgg 2820
tggtggcagt gaggagggag cccgaggggc ggaggtggag gacctccggg cccacatcga 2880
caagctgacg gggattctgc aggaggtgaa gctgcagaac agcagcaagg accgggagct 2940
gcaggccctg cgggaccgca tgctccgcat ggagagggtc atccccctgg cccaggatca 3000
tgaggatgag aatgaagaag gtggtgaggt cccctgggcc ccgcctgaag gatcagaggc 3060
agcagaggag gcagccccca gtgaccgcat gccgtcagcc cggcccccct cgccgccact 3120
gtcaagctgg gagcgggtgt cacggctcat ggaggaggac cctgccttcc gtcgtggtcg 3180
tcttcgctgg ctcaagcagg agcagctacg gctgcaggga ctgcagggct ctgggggccg 3240
gggcgggggg ctgcgcaggc ccccagcccg ctttgtgccc cctcacgact gcaagctacg 3300
cttccccttc aagagcaacc cccagcaccg ggagtcttgg ccagggatgg ggagcgggga 3360
ggctccaact ccgctccaac cccctgagga ggtcactccc catccagcca cccctgcccg 3420
ccggcctccg agtccccgaa ggtcccacca tccccgcagg aactccctgg atggaggggg 3480
ccgatcccgg ggagcgggtt ctgcacagcc tgaaccccag cacttccagc ccaaaaagca 3540
caactcttat ccccagccac cccaacccta cccagcccag cggcccccag ggccccgcta 3600
ccccccatac actactcccc cacgaatgag acggcagcgt tctgcccctg acctcaagga 3660
gagtggggca gctgtgtgag tcccacatcc tgggcagagg gcctggtggg gccccttgct 3720
aggagaaggg aagacgcccg agacgctgct tccccagaag tgctggggca gggaggccca 3780
ggagatgaga gagaaggtcc gagtaggtga tagaagacaa gggggagacc gagccggagg 3840
ctgaggaaag gaagagggca cggagttgcc aggagcaaac caaagtgaag agagagatag 3900
gaagctgcct cggggccacc ccttgcaaag ggggtgtgtc ccacaaacgc tgctatgggt 3960
ggggtggggg gctggggtgc tgcgtagcca gtgtttgact ttcttttcaa gtgggggaaa 4020
gtgggagagg actgagagtg aggcaagttc tccccagccc ctgtccgtct gtctgtctgt 4080
ctgtggtggt ttctgtttct tgggaggcat ggtaggatca taagtcattc ccctcccctt 4140
ccaggcctcc tgctatattt gggggacctg actggtttgg ctggagtccc atgaggatgt 4200
gggcccttta ataaaggata gcaaacaggg agcttgtggc ctgtttgttt tgggttttca 4260
tggaggtgta ggttatataa ggcaatggca caggtcttaa gcatacttat cagtgaagta 4320
ttgtatgtgt gctctgtgca ggcaccaccc agatctggat ataagaatgt ttccatcttg 4380
tcttcctgaa cttcaccctc ctgtctcttc cttcaggttg cgcagcccga tcttttcccc 4440
gctttttttt tttgggagac agggtcttgc tttgttgccc aggctggagg tacagtcttg 4500
gctcactgca gcctccgcct cctgagtagc tgggattaca ggcatgtgcc accacgcccg 4560
gctcattact gtttttttg tagtgacgag gtttcgccgt gttggccagg ctggtctcga 4620
actcctgatg acctcaagtg atccgcccgc cttggcctcc cagagtggtg ggattgcaga 4680
gacagtgatc ttgctatgct gcccaggctg gtctcaacct tatgggctca agtgatcctc 4740
ccacctcagc ctcccaaagt gctaggatta cctgcgtgag ctacagcgcc ctgcctgttc 4800
tgggcttctt gcagagcctc ttcagctgca gagaagcagc tctcctttct ccaagtccag 4860
agccaacagg acgaataatg aagctgttgg gaagatttac tgataataca tgtaaagggt 4920
ctagcacatt ttaggagctc aaggttggtg ccttcccttt ttctttactc tgaaccggat 4980
atgaggcctt gagaaagaag agaggcgctt gcaaaacgag gtgaggtctc aggcacagtg 5040

```
gctcacgcct gtaatcccag cactttagga gaccgaggcg ggcggatcat gaggtcagga 5100
gttcgagacc agcctggcca acatggtgaa agcccgtctc tactaaaaat acaaaaatta 5160
gacgggcatg gtggtgggca cctgtaatcc cggctacttg ggaggttgag ggaggagaat 5220
cgcttgaacc caggaggtgg aggttgcagt gagccgagac tgcaccattg cactccagcc 5280
tgggcaatag agcgagactc cgtctcaagc aagcaagcaa gcaaacaaac aaaataaaaa 5340
acgaggtcaa gtttcaaaag atgtcacccc caacctggca aaacttctcc tcaagccctg 5400
tcgttccact cttgtccgcc aggaggagaa aaggttccct cgaaggacgt ctttgcttgc 5460
gcgttcacgg agccttgaga acgagtggcc gaggggaccc ctgcggccct gcgcgcctaa 5520
gggaggacct gactcctttc agaagtagca tttcttcccc ttcgtgggtg ctcttgagtt 5580
ccaaagaaaa ggaagagaag ccttcattga gcagcttctt ctgccttagg gactgtgcta 5640
gggggtagat cgaccttagg ggaaacaatc cccgcttatt agaggaggtt ttggatcagg 5700
gtttgcttta tttgaaattt aacaaataca gaaaagcaga aggaagaaaa ttgaagtaat 5760
ccatgtttcc actgggcgcg gcggctcacg cctataatcc cagcactttg ggaggccaag 5820
gcgggcggat cacgaggtca ggagttcgag accagcctga ccaacatggt gaaacccccc 5880
gtctctacta aaattacaaa attagccggt cgtggtggca cacgcctgta atcccagcta 5940
ctcaggaggc tgaggcagga gaatcgcttg aacccgggag gcagaggttg cagtgagccg 6000
agattgcacc actgcactcc agcctgagca acagagtgag actccgttgt ctttaaaggc 6060
caatcccata gcaaatgaca gagactcact tgagtaagaa aggttttga caagaaaacc 6120
cacagaagaa gaggtaagct gtggatataa gaaaggcact acaatctgta tttaaatcta 6180
attgcacact agataatata tgtatgaaaa attattt                          6217

<210> 144
<211> 2139
<212> DNA
<213> Rattus norvegicus

<400> 144
ccaagatggc ggcggcagac acagcagcag cagccagtat tcgggaaagg cagacagtgg  60
ctttgaagcg tatgttgaat ttcaatgtgc ctcatattaa aaacagcaca ggagaaccag 120
tatggaaggt actcatttat gacagatttg gccaagatat aatctctcct ctgctatctg 180
tgaaggagct aagagacatg ggaatcactc tgcatctgct tttacactct gatcgagatc 240
ctattccaga tgttcctgca gtatactttg taatgccaac tgaagaaaat attgacagaa 300
tgtgccagga tcttcgaaat caactatatg aatcatatta tttaaatttt atttctgcta 360
tttcaagaag taaactggaa gatattgcaa atgcagcgtt agcagctagt gcagtaacac 420
aagtagccaa ggtttttgac caatatctca attttattac tttggaagat gatatgtttg 480
tattatgtaa tcaaaataag gagcttgttt catatcgtgc cattaacagg ccagatatca 540
cagacacgga aatggaaact gttatggaca ctatagttga cagcctcttc tgcttttatg 600
gtactcgggg tgatgttcct ataatcagat gttcaagagg aacagcagca gaaatggtag 660
cagtgaaact agacaagaaa cttcgagaaa atctaagaga tgcaagaaac agtcttttta 720
caggtgatac acttggagct ggccaattca gcttccagag gcccttatta gtccttgttg 780
acagaaacat agatttggca actcctttac atcatacttg gacatatcaa gcattggtgc 840
acgatgtact ggatttccat ttaaacaggg ttaatttgga agaatcttca ggagtggaaa 900
actctccagc tggtgctaga ccaaagagaa aaaacaagaa gtcttatgat ttaactccgg 960
ttgataaatt ttggcaaaaa cataaaggaa gtccattccc agaagttgca gaatcagttc 1020
agcaagaact agaatcttac agagcacagg aagatgaggt caaacgactt aaaagcatta 1080
tgggactaga aggggaagat gaaggagcca taagtatgct ttctgacaat accgctaagc 1140
taacatcagc tgttagttct ttgccagaac tccttgagaa aaaaagactt attgatctcc 1200
atacaaatgt tgccactgct gttttagaac atataaaggc aagaaaattg gatgtatatt 1260
ttgaatatga agaaaaaata atgagcaaaa ctactctgga taaatctctt ctagatataa 1320
tatcagaccc tgatgcagga actccagaag ataacatgag gttgtttctt atctattata 1380
taagcacaca gcaagcacct tctgaggctg atttggagca atataaaaaa gctttaactg 1440
atgcaggaaa ccttaatcct ttacaatata tcaaacagtg gaaggctttt accaagatgg 1500
cctcagctcc ggccagctat ggcagcacta ccactaaacc aatgggtctt ttatcacgag 1560
tcatgaatac aggatcacag tttgtgatgg aaggagtgaa gaacctggtt ttgaaacagc 1620
aaaatctacc tgttactcgt attttggaca atcttatgga gatgaagtca aaccccgaaa 1680
ctgatgacta tagatatttt gatcccaaaa tgctgcgggg caatgacagc tcagttccca 1740
gaaataaaaa tccattccaa gaggccattg tttttgtggt gggaggaggc aactacattg 1800
aatatcagaa tcttgttgac tacataaagg ggaaacaagg caaacacatt ttatatggct 1860
gcagtgagct ttttaatgct acacagttca taaaacagtt gtcacaactt ggacaaaagt 1920
aacacagaag aaccttacta tgataatcta cttggaatgt ggataaatgt aaaaagaaga 1980
aaagttagaa gagcaatatg tttccttctc tgtaacagtg tcctaacagt gaaaatcaga 2040
gttatttgtt aatttttaag gaaattatat acttaatatg tattgattaa aagaaacatt 2100
tcagaaataa aatttcaaca ttgaaaaaaa aaaaaaaaa                         2139
```

<210> 145
<211> 2464
<212> DNA
<213> Rattus norvegicus

<400> 145
ggcacgaggc aggcttcatt tggagtcagg cctggctgtt gctcaggtga ccagcttgtg 60
tctctgggag ggcgctgctt tccccggcca cccggcgcga tgatccagaa tgtcggaaat 120
cacctgcgac ggctctcttt ggaaggagaa attgcagaac ccctgggctg gtttattatc 180
agcagcaatc tccaaacaag ccccaggggc tgtcagatcc cccacgggct ggctgtgtag 240
agtggaatca ccttcagcaa gtgtcggcct ctggaattct attcgggctt ggcctctgtg 300
ttctccaacc acacatcccg gaagtcagcc ttacgtgcgg ggaacgacag tgccatggca 360
gacggcgagg gataccggaa ccccacggag gtgcagatga gccagctggt gctgccctgc 420
cacaccaacc aacgtggtga gctgagcgtc gggcagctgc tcaagtggat tgacaccacg 480
gcttgcctgt ccgcggagag gcacgctggc tgcccctgtg tcacagcttc catggatgac 540
atctattttg agcacaccat tagtgttgga caagtggtga atatcaaggc caaggtgaac 600
cgggccttca actccagcat ggaggtgggc atccaggtgg cctcggagga cctgtgctct 660
gagaagcagt ggaatgtgtg caaggccttg gccaccttcg tggcccgccg agagatcacc 720
aaggtgaagc tgaagcagat cacgccgcgg acagaagagg agaagatgga gcacagtgtg 780
gcggctgagc gccggcgcat gcgccttgtc tatgcagaca ccatcaagga cctcctggcc 840
aactgcgcca ttcagggcga tctggagagc agagactgta gccgcatggt gccggctgag 900
aagacccgtg tggagagtgt ggagctggtc ctgcctcccc acgccaatca ccagggcaac 960
acctttgggg gccagatcat ggcctggatg gagaatgtgg ccaccattgc agccaggtga 1020
gggcagggtg tgctgcctct gcctcccctc ctttctcctc ctcctcccct tggctacctc 1080
cctctggagg ggaaacccca gcttggggtt ggcattcaag gcttcagaag cttggctgtt 1140
ctgaatcaga gaaatgaatt tttgtgaact gaccattcct tgttctacta aaaaagctag 1200
catcttttac atgggaaaca ccaggtctct tggcctggca ctagatcctc cccttgatct 1260
ggccctacct gcactccttc tagtatctat gttcccttca catcaagcct tctagtatct 1320
atgttcgctt cacatcaaac catttgctgt tctctgttcc catcctccac tttcccagcc 1380
cctgcctttg ctcctgatgt agcctcctgc cgtgcttccc ctactcttct ttgtctgcta 1440
atatcctgcc cacttcctcc ataaagccat ctctgactgt tcccttcttc taaggggtga 1500
aaattgtttt ctctcctcta acatctgttt ctgtccgggg cttgttctac cctaaatatc 1560
agggtatttt ttatagttat ggtaactgac cttcactaat tgacactctc acacctccaa 1620
gactttgctc ttgctgttcc ctctaccagg agtgcctttc ccaacccatg ccctttccag 1680
ccaggtggat tcctccttat tctttagagc ctggcttaaa tggcccctcc tccagtttaa 1740
cctgtgggag acagtgcata agcaatgctg ttttgggcag gcctggctat gagtgcagta 1800
agatcctgga ggagcctgat ggtcagggaa ggctgcctga aggaagagca cttcagctgg 1860
gacttgaatg ccaagtagct ttgggtaagg ggagggcttc tggatagtgg gaacagcagc 1920
taccaaggtg taaaagttgg aaggaaaatg ggaaaggggt ttacccaaag ccctgctttc 1980
ttctgtcccc tcaaacttgg cttctttcca gccatgcata gacctcagta ttctaaacta 2040
tgaaatggga ctttagttct gtgcctctgg gcagaactgc cactgggttg ggtggcagtg 2100
ggtgggtcag aatgtgtagt tccaggctgc gtctggggat gggaccaggg tagaaggccg 2160
gcccaagctg gcctagcatg gtggctcaca cctgtaatcc cagcgctttg ggaggctgag 2220
gccacttagg ccagaagttc aagaccagcc tgggaacaag gtaaaacctc atctctacta 2280
aaaatacaaa aattagccag gtgtggtggt gcgtgcctgt agtctcagct acttgggagg 2340
ctgaggcagg agagtcactt gaacccggga ggcggaggtt gcagtgagcc gagattgcac 2400
cactgcattc cagcctgggc aacagagtga aaccctgtct caaaaaaaaa aaaaaaaaaa 2460
aaaa 2464

<210> 146
<211> 1104
<212> DNA
<213> Rattus norvegicus

<400> 146
ggtcgcttgg tggctccgtc tgttgtccgt ccgcccgcgg gtgccatcat ggcggacgcg 60
gccagtcagg tgctcctggg ctccggtctc accatcctgt cccagccgct catgtacgtg 120
aaagtgctca tccaggtggg atatgagcct cttcctccaa caataggacg aaatattttt 180
gggcggcaag tgtgtcagct tcctggtctc tttagttatg ctcagcacat tgccagtatc 240
gatgggaggc gcgggttgtt cacaggctta actccaagac tgtgttcggg agtccttgga 300
actgtggtcc atggtaaagt tttacagcat taccaggaga gtgacaaggg tgaggagtta 360
ggacctggaa atgtacagaa agaagtctca tcttcctttg accacgttat caaggagaca 420

actcgagaga tgatcgctcg ttctgctgct accctcatca cacatccctt ccatgtgatc 480
actctgagat ctatggtaca gttcattggc agagaatcca agtactgtgg actttgtgat 540
tccataataa ccatctatcg ggaagagggc attctaggat ttttcgcggg tcttgttcct 600
cgccttctag gtgacatcct ttctttgtgg ctgtgtaact cactggccta cctcgtcaat 660
acctatgcac tggacagtgg ggtttctacc atgaatgaaa tgaagagtta ttctcaagct 720
gtcacaggat tttttgcgag tatgttgacc tatccctttg tgcttgtctc caatcttatg 780
gctgtcaaca actgtggtct tgctggtgga tgccctcctt actccccaat atatacgtct 840
tggatagact gttggtgcat gctacaaaaa gaggggaata tgagccgagg aaatagctta 900
tttttccgga aggtcccctt tgggaagact tattgttgtg acctgaaaat gttaatttga 960
agatgtgggg cagggacagt gacatttctg tagtcccaga tgcacagaat tatgggagag 1020
aatgttgatt tctatacagt gtggcgcgct tttttaataa tcatttaatc ttgggaaaat 1080
taaaaaaaaa aaaaaaaaaa aaaa 1104

<210> 147
<211> 186
<212> DNA
<213> Rattus norvegicus

<400> 147
atggatccca actgctcctg cgccgccggt gactcctgca cctgcgccgg ctcctgcaaa 60
tgcaaagagt gcaaatgcac ctcctgcaag aaaagctgct gctcctgctg ccctgtgggc 120
tgtgccaagt gtgcccaggg ctgcatctgc aaaggggcgt cggacaagtg cagctgctgc 180
gcctga 186

<210> 148
<211> 3152
<212> DNA
<213> Rattus norvegicus

<400> 148
aattccggcc gcgtcgacgg gagagtcggt agcgcggcgg ccgcggagcc ctgcgagtag 60
gcaagcgttg ggcccatgca ggacgcggag aacgtggcgg tgcccgaggc ggccgaggag 120
cgcgccgagc ccggccagca gcagccggcc gccgagccgc cgccagccga ggggctgctg 180
cggcccgcgg ggcccggcgc tccggaggcc gcggggaccg aggcctccag tgaggaggtg 240
gggatcgcgg aggccgggcc ggagcccgag gtgaggaccg agccggcggc cgaggcagag 300
gcggcctccg gcccgtccga gtcgccctcg ccgccggccg ccgaggagct gcccgggtcg 360
catgctgagc cccctgtccc ggcacagggc gaggccccag gagagcaggc tcgggacgag 420
cgctccgaca gccgggccca ggcggtgtcc gaggacgcgg gaggaaacga gggcagagcg 480
gccgaggccg aaccccgggc gctggagaac ggcgacgcgg acgagccctc cttcagcgac 540
cccgaggact tcgtggacga cgtgagcgag gaagaattac tgggagatgt actcaaagat 600
cggccccagg aagcagatgg aatcgattcg gtgattgtag tggacaatgt ccctcaggtg 660
ggacccgacc gacttgagaa actcaaaaat gtcatccaca agatcttttc caagtttggg 720
aaaatcacaa atgattttta tcctgaagag gatgggaaga caaaagggta tattttcctg 780
gagtacgcgt cccctgccca cgctgtggat gctgtgaaga acgccgacgg ctacaagctt 840
gacaagcagc acacattccg ggtcaacctc tttacggatt ttgacaagta tatgacgatc 900
agtgacgagt gggatattcc agagaaacag cctttcaaag acctggggaa cttacgttac 960
tggcttgaag aggcagaatg cagagatcag tacagtgtga tttttgagag tggagaccgc 1020
acttccatat tctggaatga cgtaaaagac cctgtctcaa ttgaagaaag agcgagatgg 1080
acagagacgt atgtgcgttg gtctcctaag ggcacctacc tggctacctt tcatcaaaga 1140
ggcattgctc tatgggggg agagaaattc aagcaaattc agagattcag ccaccaaggg 1200
gttcagctta ttgacttctc accttgtgaa aggtacctgg tgacctttag ccccctgatg 1260
gacacgcagg atgaccctca ggccataatc atctgggaca tccttacggg gcacaagaag 1320
aggggttttc actgtgagag ctcagcccat tggcctattt ttaagtggag ccatgatggc 1380
aaattctttg ccagaatgac cctggatacg cttagcatct atgaaactcc ttctatgggt 1440
cttttggaca agaagagttt gaagatctct gggataaaag acttttcttg gtctcctggt 1500
ggtaacataa tcgccttctg ggtgcctgaa gacaaagata ttccagccag ggtaaccctg 1560
atgcagctcc ctaccaggca agagatccga gtgaggaacc tgttcaatgt ggtggactgc 1620
aagctccatt ggcagaagaa cggagactac ttgtgtgtga aagtagatag gactccgaaa 1680
ggcacccagg gtgttgtcac aaattttgaa attttccgaa tgagggagaa acaggtacct 1740
gtggatgtgg tcgagatgaa agaaaccatc atagcctttg cctgggaacc aaatggaagt 1800
aagtttgctg tgctgcacgg agaggctccg cggatatctg tgtctttcta ccacgtcaaa 1860
aacaacggga agattgaact catcaagatg ttcgacaagc agcaggcgaa caccatcttc 1920
tggagccccc aaggacagtt cgtggtgttg gcgggcctga ggagtatgaa cggtgcctta 1980

gcgtttgtgg acacttcgga ctgcacggtc atgaacatcg cagagcacta catggcttcc 2040
gacgtcgaat gggatcctac tgggcgctac gtcgtcacct ctgtgtcctg gtggagccat 2100
aaggtggaca acgcgtactg gctgtggact ttccagggac gcctcctgca gaagaacaac 2160
aaggaccgct tctgccagct gctgtggcgg ccccggcctc ccacactcct gagccaggaa 2220
cagatcaagc aaattaaaaa ggatctgaag aaatactcta agatctttga acagaaggat 2280
cgtttgagtc agtccaaagc ctcaaaggaa ttggtggaga gaaggcgcac catgatggaa 2340
gatttccgga agtaccggaa aatggcccag gagctctata tggagcagaa aaacgagcgc 2400
ctggagttgc gaggaggggt ggacactgac gagctggaca gcaacgtgga cgactgggaa 2460
gaggagacca ttgagttctt cgtcactgaa gaaatcattc ccctcgggaa tcaggagtga 2520
cctggagcac tgtggggacg gactccgcct gctgttcccg cgctgagcta caggactccc 2580
gagtgtgagc cgcggttcct ctgttgcagc gcagccgtgt gtgctgtgga gccgaggccg 2640
tcctgcagga agccgcgtga ctcccgcctc ctccctgtgc tctctggctc tggactgtga 2700
ctgcgcctgg attctgccat tgcgacacat ttttgtgcct ttcagcccct ggtgtctgca 2760
gtgggggatt taaggcaccc gcttccactt ctttcttgtt tggagttttc tgttggaacc 2820
gccggcgttg gctccgaaga cttagcgacg ccactggcgg caccttctcc tgcgcccagt 2880
gatgtttcca cggtgcctgt acacagccga gcagcatttc cgttgaagga cttgcatccc 2940
cattgcgggc agtgctggac gtgtcccgga gacccaccgg gaggcgccgc atgccttgta 3000
cccccaccgt gcaggttgtg gccggttttc tccgcaggtt gaacatggaa ataaaagcaa 3060
acttgtatgg aattcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 3152

<210> 149
<211> 1740
<212> DNA
<213> Rattus norvegicus

<400> 149
cgaagactga gcggttgtgg ccgcgttgcc gacctccagc agcagtcggc ttctctacgc 60
agaacccggg agtaggagac tcagaatcga atctcttctc cctccccttc ttgtgagatt 120
tttttgatct tcagctacat tttcggcttt gtgagaaacc ttaccatcaa acacgatggc 180
cagcaacgtt accaacaaga cagatcctcg ctccatgaac tcccgtgtat tcattgggaa 240
tctcaacact cttgtggtca agaaatctga tgtggaggca atcttttcga agtatggcaa 300
aattgtgggc tgctctgttc ataagggctt tgccttcgtt cagtatgtta atgagagaaa 360
tgcccgggct gctgtagcag gagaggatgg cagaatgatt gctggccagg ttttagatat 420
taacctggct gcagagccaa aagtgaaccg aggaaaagca ggtgtgaaac gatctgcagc 480
ggagatgtac ggctcctctt ttgacttgga ctatgacttt caacgggact attatgatag 540
gatgtacagt tacccagcac gtgtacctcc tcctcctcct attgctcggg ctgtagtgcc 600
ctcgaaacgt cagcgtgtat caggaaacac ttcacgaagg ggcaaaagtg gcttcaattc 660
taagagtgga cagcggggat cttccaagtc tggaaagttg aaaggagatg accttcaggc 720
cattaagaag gagctgaccc agataaaaca aaaagtggat tctctcctgg aaaacctgga 780
aaaaattgaa aaggaacaga gcaaacaagc agtagagatg aagaatgata agtcagaaga 840
ggagcagagc agcagctccg tgaagaaaga tgagactaat gtgaagatgg agtctgaggg 900
gggtgcagat gactctgctg aggaggggga cctactggat gatgatgata atgaagatcg 960
gggggatgac cagctggagt tgatcaagga tgatgaaaaa gaggctgagg aaggagagga 1020
tgacagagac agcgccaatg gcgaggatga ctcttaagca catagtgggg tttagaaatc 1080
ttatcccatt atttctttac ctaggcgctt gtctaagatc aaatttttca ccagatcctc 1140
tcccctagta tcttcagcac atgctcactg ttctccccat ccttgtcctt cccatgttca 1200
ttaattcata ttgccccgcg cctagtccca ttttcacttc ctttgacgct cctagtagtt 1260
ttgttaagtc ttaccctgta atttttgctt ttaattttga tacctcttta tgacttaaca 1320
ataaaaagga tgtatggttt ttatcaactg tctccaaaat aatctcttgt tatgcaggga 1380
gtacagttct tttcattcat acataagttc agtagttgct tccctaactg caaaggcaat 1440
ctcatttagt tgagtagctc ttgaaagcag ctttgagtta gaagtatgtg tgttacaccc 1500
tcacattagt gtgctgtgtg gggcagttca acacaaatgt aacaatgtat ttttgtgaat 1560
gagagttggc atgtcaaatg catcctctag aaaaataatt agtgttatag tcttaagatt 1620
tgttttctaa agttgatact gtgggttatt tttgtgaaca gcctgatgtt tgggaccttt 1680
tttcctcaaa ataaacaagt ccttattaaa ccaggaattt ggagaaaaaa aaaaaaaaaa 1740

<210> 150
<211> 3624
<212> DNA
<213> Rattus norvegicus

<400> 150

gcaggttggg agggaaagtc gggggaggac gcggaagagg agctgtggga agggggagga 60
gggagggagg aaaagaggag gagacggagg agaactgagc agagcagagc atcgagccaa 120
aggggagatg agtttgtctg tcctctgctg aggctacggc cgggcctagg gaactgggag 180
cttgggtgga agcgacaccc gtggaagtgg gaggaggtgg cgccgggact ttaacccctt 240
gtgggctctg cggcagggga tttaaccctt tgtggatctg gcccctcgga ggcagcgtca 300
tcggtagttt taaccccttc ggggctgggt ttcacgcact ggacttaccc tcatcacctt 360
gctcaccaac tcctttattg gggtgctccg cttggaggtt tgaggcccac ctccgcccat 420
tacgtactgt tcctgccgct gcacccccct ggacccgcta gctggccgca ctgtgggcgc 480
ttaacccttt actgacttga gctccccaga ttgcagttgg agtttgctga tagaaggact 540
agctaaaggc gtcactgcag gaattacaaa ctgaagagga ctctgttgga ctgttttttt 600
tttctttttc ttttttttaa gaaaaaccca ttttttttcct taaggactta ctagccaaaa 660
tttcttaaac ttcgaggact ctactagcca tggccgagcc attcttgtca gaatatcaac 720
accagcctca aactagcaac tgtacaggtg ctgctgctgt ccaggaagag ctgaaccctg 780
agcgcccccc aggcgcggag gagcgggtgc ccgaggagga cagtaggtgg caatcgagag 840
cgttccccca gttgggtggc cgtccggggc cggaggggga agggagcctg gaatcccaac 900
cacctccctt gcagacccag gcctgtccag aatctagctg cctgagagag ggcgagaagg 960
gccagaatgg ggacgactcg tccgctggcg gcgacttccc gccgccggca gaagtggaac 1020
cgacgcccga ggccgagctg ctcgcccagc cttgtcatga ctccgaggcc agtaagttgg 1080
gggctcctgc cgcagggggc gaagaggagt ggggacagca gcagagacag ctggggaaga 1140
aaaaacatag gagacgcccg tccaagaaga agcggcattg gaaaccgtac tacaagctga 1200
cctgggaaga gaagaaaaag ttcgacgaga aacagagcct tcgagcttca aggatccgag 1260
ccgagatgtt cgccaagggc cagccggtcg cgccctataa caccacgcag ttcctcatgg 1320
atgatcacga ccaggaggag ccggatctca aaaccggcct gtactccaag cgggccgccg 1380
ccaaatccga cgacaccagc gatgacgact tcatggaaga agggggtgag gaggatgggg 1440
gcagcgatgg gatgggaggg gacggcagcg agtttctgca gcgggacttc tcggagacgt 1500
acgagcggta ccacacggag agcctgcaga acatgagcaa gcaggagctc atcaaggagt 1560
acctggaact ggagaagtgc ctctcgcgca tggaggacga gaacaaccgg ctgcggctgg 1620
agagcaagcg gctgggtggc gacgacgcgc gtgtgcggga gctggagctg gagctggacc 1680
ggctgcgcgc cgagaacctc cagctgctga ccgagaacga actgcaccgg cagcaggagc 1740
gagcgccgct ttccaagttt ggagactaga ctgaaacttt tttgggggag ggggcaaagg 1800
ggacttttta cagtgatgga atgtaacatt atatacatgt gtatataaga cagtggacct 1860
ttttatgaca cataatcaga agagaaatcc ccctggcttt ggttggtttc gtaaatttag 1920
ctatatgtag cttgcgtgct ttctcctgtt cttttaatta tgtgaaactg aagagttgct 1980
tttcttgttt tccttttttag aagtttttttt ccttaatgtg aaagtaattt gaccaagtta 2040
taatgcattt ttgtttttaa caaatcccct ccttaaacgg agctataagg tggccaaatc 2100
tgagaacaat taaattcatt ttagttataa taaatttaat atttgtaaat gtaacatagt 2160
ttcagtgtga tttctagagc taattcaaaa tagtattgat atattttatg tgactgcatt 2220
tttggggagg ggtaccgaaa tcgttaaatt tgtcagtttg caaaaatatc aatctttaat 2280
gggagaattt tcaatttgcc aatttttttcc ttgaatgggt ttaagtatgc tacaatatac 2340
agttcaggca aaatttaaga tgtaattatc ttcaatactt aagtgtgctt gctttctagt 2400
gccttggttt tctttcttga tgctggaaaa ataaacaaac cggtattgag tgtttaggcg 2460
agtggaaagt ggctacaatc caaaatttta aatttaactc tgcctcggcc attcaaaagt 2520
ctaataacaa aaaatgtaaa cctaatttgg cagtttgtta ggttagacaa ctgacagcct 2580
catttcattc ctacaagttg gttttcagta atctcttcct tccccccagt aaggctggaa 2640
gaggctcttg gcaaacttct tagcgcaagc aatggttaga ttaatttgtg aggcagctct 2700
ttaagacgtt cagaggtaag aaatactgga tttataaagc aaatggctgt ttgggggatt 2760
ccaaggattt acctaattgt ccaattctac gtgctctcta taccaaaaca aaaaaaaagc 2820
tatccacctt tccatgtggg tcaaactaaa attagaaatg tcccctcact gcagatcaaa 2880
tgtaaagctt ccagttaagg agctaaatga ggtcctcagc tgaatgagga accctgtaca 2940
tccccttgca cagccctatt ctaaatcgct taaactatgc tgatagctgc ttaggttctt 3000
gagtagttct gctcttaaac gtagggaggc cctgagaact aaattttgcc ccaaaataaa 3060
aacagaaatt atgagattgc ctcctgtcat tttggttaac ccagtccttc acctgccctg 3120
tgtcagtgtc ttctgagggc aattgcgttg ctcaaatcac tagcacagag gttccttaat 3180
ttggggcctt agaaaccatt gtgggccttg gggtccatga accccatgaa attatttgta 3240
gacttgtatg tacatttttc tggggagaag gttcaagaga ttcataagat tgtcaaactc 3300
cttgaaggtt cagaacctct gcagggaagg gggaagaaaa ccctcccatt aggaagcatg 3360
cttttgcagt taaatggcga tggtggaggt gatagggact tcaagagtaa aatgcacctt 3420
gtattgcata agaagcatac acaaatcaat aaatcaaggg agattatacc agtaggactg 3480
aatcagggcc ttcaaagctg gactgagttg gtcctgttct ggcacatatg gtccactgga 3540
gacaatgtat gattgagctt ttctttggtc taaaaattat attaaacatt tattttgaaa 3600
aaaaaaaaaa aaaaaaaaaa aaaa 3624

<210> 151

<211> 1825
<212> DNA
<213> Rattus norvegicus

<400> 151
ggggagctct gcgaggggcc ggagcgcggc ggagccatgc agtacccgca ccccgggccg 60
gcggcgggcg ccgtgggggt gccgctgtac gcgcccacgc cgctgctgca acccgcacac 120
ccgacgccct tttacatcga ggacatcctg ggccgcgggc ccgccgcgcc cacgcccgcc 180
cccacgctgc cgtcccccaa ctcctccttc accagcctcg tgtcccccta ccggaccccg 240
gtgtacgagc ccacgccgat ccatccagcc ttctcgcacc actccgccgc cgcgctggcc 300
gctgcctacg gacccggcgg cttcgggggc cctctgtacc ccttcccgcg gacggtgaac 360
gactacacgc acgccctgct ccgccacgac cccctgggca aacctctact ctggagcccc 420
ttcttgcaga ggcctctgca taaaaggaaa ggcggccagg tgagattctc caacgaccag 480
accatcgagc tggagaagaa attcgagacg cagaaatatc tctctccgcc cgagaggaag 540
cgtctggcca agatgctgca gctcagcgag agacaggtca aaacctggtt tcagaatcga 600
cgcgctaaat ggaggagact aaaacaggag aaccctcaaa gcaataaaaa agaagaactg 660
gaaagtttgg acagttcctg tgatcagagg caagatttgc ccagtgaaca gaataaaggt 720
gcttctttgg atagctctca atgttcgccc tcccctgcct cccaggaaga ccttgaatca 780
gagatttcag aggattctga tcaggaagtg gacattgagg gcgataaaag ctattttaat 840
gctggatgat gaccactggc attggcatgt tcagaaaact ggatttagga ataatgtttt 900
gctacagaaa atcttcatag aagaactgga aggctatata agaaagggaa tcaattctct 960
ggtattctgg aaacctaaaa atatttggtg cactgctcaa ttaacaaacc tacatggaga 1020
ccttaatttt gacttaacaa atagtttatg tactgctctt aggttgtttt gataaagtga 1080
cattatagtg attaaattct tcccccttta aaaaaacagt tagtggtttt cactatttat 1140
aaaaaattaa ttttgaactt tttgttaaat ttttaagtta tagctttaaa ggttttaata 1200
ggaccttctt gaacgacttt tctgtaatct gtttatctcc cacttaatgg aaaggcaaag 1260
gggtacccca aatccagagg tgcctacatt tcaggcagcc ttggagtatt ttaaaaggaa 1320
aacattcttt acttttatat gacattctta tactgctgtc tcaaatccaa aaacatttca 1380
gagctcttgt ctcagagatg tgtgttcttt ttgtcagaga tatggttgat gagaatctta 1440
aatgcttgtt ttgcactatc acttagtacc tgtttgacca aggtgttaag gggatagtac 1500
ctcccaattc aagcagagaa actgacctga ctaaagttaa tcgcagatga actagaagtc 1560
acaggttaat taaatgtaag tagattgtag atactgtttt atatcaaaca atgtttataa 1620
tgtgtatata gaattgttca ctgtaaaaaa aatggccaaa atgtgttttt tttttaataa 1680
gtaacttgac tataaaataa agccgtccgt gggacgactg acctcgtaaa aaaaaaaaaa 1740
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1800
aaaaaaaaaa aaaaaaaaaa aaaaa 1825

<210> 152
<211> 1795
<212> DNA
<213> Rattus norvegicus

<400> 152
acgcgtccgc ccacgcgtcc gcccacgcgt ccggtcgggg ccagagcgca ggtgtacctg 60
gcggccgtgc tggagcacct gaccgccgag atcctggagc tggctggcaa cccggcccgc 120
gacaagaaga cccgcatcat cctgcgccac ctgtagctgg ccattcgcaa cggcgaggag 180
cttaacaagc tgctgggcga agtcaccatc gcgcagggcg gtgtcctgcc caacattcag 240
ggcgtgcttc tgccccagaa gaccaagagc caccacaagg ccaagggtga aaaccattca 300
ctaggagagg agaaacacaa tggccaccaa gacagagttg agtcccacag caagggagag 360
caagaacgca caagatatgc aagtggatga gacactgatc cccaggaaag gtccaagttt 420
atgttctgct cgctatggaa tagccctcgt cttacatttc tgcaatttca caacgatagc 480
acaaaatgtc atcatgaaca tcaccatggt agccatggtc aacagcacaa gccctcaatc 540
ccagctcaat gattcctctg aggtgctgcc tgttgactca tttggtggcc taagtaaagc 600
cccaaagagt cttcctgcaa agtcctcaat acttgggggt cagtttgcaa tttgggaaaa 660
gtggggccct ccacaagaac gaagcagact ctgcagcatt gctttatcag gaatgttact 720
gggatgcttt actgccatcc tcataggtgg cttcattagt gaaacccttg ggtggccctt 780
tgtcttctat atctttggag gtgttggctg tgtctgctgc cttctctggt ttgttgtgat 840
ttatgatgac ccctttttcct atccatggat aagcacctca gaaaaagaat acatcatatc 900
ctccttgaaa caacaggtcg ggtcttctaa gcagcctctt cccatcaaag ctatgctcag 960
atctctaccc atttggtcca tatgtttagg ctgtttcagc catcaatggt tagttagcac 1020
aatggttgta tacataccaa cttacatcag ctctgtgtac catgttaaca tcagagacaa 1080
tggacttcta tctgcccttc cttttattgt tgcctgggtc ataggcatgg tgggaggcta 1140
tctggcagat ttccttctaa ccaaaaagtt tagactcatc actgtgagga aaattgccac 1200

aattttagga agtctcccct cttcagcact cattgtgtct ctgccttacc tcaattccgg 1260
ctatatcaca gcaactgcct tgctgacgct ctcttgcgga ttaagcacat tgtgtcagtc 1320
agggatttat atcaatgtct tagatattgc tccaaggtat tccagttttc tcatgggagc 1380
atcaagagga ttttcgagca tagcacctgt cattgtaccc actgtcagcg gatttcttct 1440
tagtcaggac cctgagtttg ggtggaggaa tgtcttcttc ttgctgtttg ccgttaacct 1500
gttaggacta ctcttctacc tcatatttgg agaagcagat gtccaagaat gggctaaaga 1560
gagaaaactc actcgtttat gaagttatcc caccttggat ggaaaagtca ttaggcaccg 1620
tattgcataa aatagaaggc ttccgtgatg aaaataccag tgaaaagatt ttttttcct 1680
gtggctcttt tcaattatga gatcagttca ttattttatt cagacttttt tttgagagaa 1740
atgtaagatg aataaaaatt caaataaaat gataactaag aaaaaaaaaa aaaaa 1795

<210> 153

<400> 153
000

<210> 154
<211> 5011
<212> DNA
<213> Rattus norvegicus

<400> 154
gtgccgggaa gtggctccag ggagaagagg cctcttccct cacccgctgt gggagctgcg 60
ccccgaaagc ctgccccggc acgtcgggct ctcctgaccc gccaagacca gagagccgtt 120
ggcgccctcc gcccgggcct gccggtccgt ttattttaag aagctttgtg cgcctgctgt 180
ggggatttct gatccaggct gcgaagaatt tcgaagtctg gaaaatagca actgtgtttg 240
tttctaaagg atcttctcct gacccagcat cgctcatcac aatgaagaac caagacaaaa 300
agaacggggc tgccaaacaa tccaatccaa aaagcagccc aggacaaccg gaagcaggac 360
ccgagggagc ccaggagcgg cccagccagg cggctcctgc agtagaagca gaaggtcccg 420
gcagcagcca ggctcctcgg aagccggagg gggctcaagc cagaacggct cagtctgggg 480
cccttcgtga tgtctctgag gagctgagcc gccaactgga agacatactg agcacatact 540
gtgtggacaa taaccagggg ggccccggcg aggatggggc acagggtgag ccggctgaac 600
ccgaagatgc agagaagtcc cggacctatg tggcaaggaa tggggagcct gaaccaactc 660
cagtagtcaa tggagagaag gaaccctcca agggggatcc aaacacagaa gagatccggc 720
agagtgacga ggtcggagac cgagaccatc gaaggccaca ggagaagaaa aaagccaagg 780
gtttggggaa ggagatcacg ttgctgatgc agacattgaa tactctgagt accccagagg 840
agaagctggc tgctctgtgc aagaagtatg ctgaactgct ggaggagcac cggaattcac 900
agaagcagat gaagctccta cagaaaaagc agagccagct ggtgcaagag aaggaccacc 960
tgcgcggtga gcacagcaag gccgtcctgg cccgcagcaa gcttgagagc ctatgccgtg 1020
agctgcagcg gcacaaccgc tccctcaagg aagaaggtgt gcagcgggcc cgggaggagg 1080
aggagaagcg caaggaggtg acctcgcact tccaggtgac actgaatgac attcagctgc 1140
agatggaaca gcacaatgag cgcaactcca agctgcgcca agagaacatg gagctggctg 1200
agaggctcaa gaagctgatt gagcagtatg agctgcgcga ggagcatatc gacaaagtct 1260
tcaaacacaa ggacctacaa cagcagctgg tggatgccaa gctccagcag gcccaggaga 1320
tgctaaagga ggcagaagag cggcaccagc gggagaagga ttttctcctg aaagaggcag 1380
tagagtccca gaggatgtgt gagctgatga agcagcaaga gacccacctg aagcaacagc 1440
ttgccctata cacagagaag tttgaggagt tccagaacac actttccaaa agcagcgagg 1500
tattcaccac attcaagcag gagatggaaa agatgactaa gaagatcaag aagctggaga 1560
aagaaaccac catgtaccgg tcccggtggg agagcagcaa caaggccctg cttgagatgg 1620
ctgaggagaa aacagtccgg gataaagaac tggagggcct gcaggtaaaa atccaacggc 1680
tggagaagct gtgccgggca ctgcagacag agcgcaatga cctgaacaag agggtacagg 1740
acctgagtgc tggtggccag ggctccctca ctgacagtgg ccctgagagg aggccagagg 1800
ggcctggggc tcaagcaccc agctccccca gggtcacaga agcgccttgc tacccaggag 1860
caccgagcac agaagcatca ggccagactg ggcctcaaga gcccacctcc gccagggcct 1920
agagagcctg gtgttgggtc atgctgggaa gggagcggca gcccagccag gcctggccca 1980
taaaaggctc ccatgctgag cagcccattg ctgaagccag gatgttctga cctggctggc 2040
atctggcact tgcaattttg gattttgtgg gtcagtttta cgtacatagg gcattttgca 2100
aggccttgca aatgcattta tacctgtaag tgtacagtgg gcttgcattg gggatggggg 2160
tgtgtacaga tgaagtcagt ggcttgtctg tgagctgaag agtcttgaga ggggctgtca 2220
tctgtagctg ccatcacagt gagttggcag aagtgacttg agcatttctc tgtctgattt 2280
gaggctcaga cccctccctg cccttcagag ctcaagacaa gtaatacacc caggtcttga 2340
ctgcatttgt cttgtgagca gggcttgctt ggtcagctca ggccctccta gctgctctgg 2400
aggctccttt gattctctag acctggaaaa ggtgtcccta ggcagagccc tggcagggcg 2460

ctcagagctg gggatttcct gcctggaaca agggacctgg agaatgtttt tgcgtgggat 2520
gatgtgctgg tcaggagccc cttgggcatc gcttcccctg ccctttggta gtgccaggac 2580
caggccaatg atgcttctca gtagccttat cattcacagg tgcctctcta gcctgcacaa 2640
atgattgaca agagatcacc caaaggatta tttctgaagg tgtttttttc tttatttctt 2700
tttctttttt ttttttttte tttttctttt ttttttgcac atgacagtgt ttgtattgag 2760
gaccttccaa ggaagaggga tgctgtagca gtggtgcctg ggtgcctggc ctccagtgtc 2820
ccacctcctt caccacccca cttggctcct ttgccatctt gatgctgagg tttcctgttt 2880
ggtgagatca ggttgtttgt ggtaaaagaa aggaaagggc ttctgatggc tttgccacaa 2940
gcttacctgt gggtttcagt cctgagaggc caccaccagt tcccatcagc actgtctcca 3000
tgcagcagtt gctgggtccc atgtccagct gcctctttgg cttcatgggt ttttctgctt 3060
cctgccccca cccccacatg tgcaatcctc aagatttgtc ctgattctat ttcctggcac 3120
ctccctgcct gtccttgggg attctacttc ttcctgtgtg ggagcccata gctgttgtct 3180
aacaggtaag aaatgaaatt gaactattga ctgggcccca gaaatccata aaatggctgc 3240
agacagttgt ttctgtgtcc tgttctaccc ccactccagt acataactac tatgtactgt 3300
gtagagccat tctatatgct gaatgttctg ctgttgcaaa cttgccaggg tattagccag 3360
tgtttgtgcc aagcagtttt ctgggacaac agaatgactc agaccaagat ggataggatg 3420
gttagggctt tgcttcttgc tgtttttctt tgaagctagt tcattgtcct gcaggtccct 3480
tcatcttcca tacctagccc actcttttag cccttacctt aaatctctca gataagttgg 3540
ttcacaaaga atgttaagta ctgaatcatg tgtgactgag accagagatg gcaaatgaat 3600
ggcacaccat ttctccttct cctgccccag ggcaggtacc actgatctgc atcagagttg 3660
cctgctattc tctggtgtat ccttcacatc taggtgccct caagcagctg tgtgagtgtt 3720
gagatctctg ccatctctgg ctgagatact gctgtcctgt gaagtgtttc ccatgacctt 3780
tttcttcccc tttgaatccc tctgtctgga gtagtccttg cctcttcctg ctccagtagg 3840
gccttttccc taccccagcc cctgtgccag gctaagctgg tacaagagct gccaacctca 3900
cagagtgttt gctaggcgag agaggtgcag ggaagaggca gaggtatgca ccttcccccc 3960
tgaagagagg ggaaaggcct acagtggccc acataattgc ctgactcaca cttcagctac 4020
ctcttaatgc ctgtggaggg actggagctg ctggatccca gtgtggtggt gtaggaggcc 4080
acagtgagca ggtggcccca gctgggtttc ccaggtcagg aatgtgggcc ccaggcaagg 4140
tgcagccttt gctcacagct ccatccatgt ctagaccttc aggccagtct gcagatgagg 4200
ttccctacct ttttcttctc ttcattgacc aaatcaacca atcactacag ctgctctgct 4260
tctgctttcc aaagtagccc aggtcctggg ccagatgcag gggaggtgcc tatccatgag 4320
tgaaggccag tgtcttcctc acctgggtgg gtcccacact tgtgacctca gttttaggac 4380
caagatctgt gttggtttct tagattgcta gcttttcctc caggggacca cagcaggtga 4440
agctcaagag cgcatggctc tgctaatagt aaattgtttt cagggccttg tccagctgag 4500
agcttcatgt ccaccagatt ctgagaggtg tcagcagcac ttttttttt tatttgttgt 4560
ttgttttcca tgaggttatc ggaccatggg ctgagctcag gcactttctg taggagactg 4620
ttatttctgt aaagatggtt atttaaccct cctccacccc atcacggtgg ccctgagggc 4680
tgacccggag gccagtggag ctgcctggtg tccacggggg agggccaagg cctgctgagc 4740
tgattctcca gctgctgccc cagcctttcc gccttgcaca gcacagaggt ggtcacccca 4800
gggacagcca ggcacctgct cctcttgccc ttcctggggg aagggagctg ccttctgtcc 4860
ctgtaactgc tttccttatg gcccagcccg gccactcaga cttgtttgaa gctgcactgg 4920
cagcttttt gtctcctttg ggtattcaca acagccaggg acttgatttt gatgtatttt 4980
aaaccacatt aaataaagag tctgttgcct t 5011

<210> 155

<400> 155
000

<210> 156
<211> 3452
<212> DNA
<213> Rattus norvegicus

<400> 156
ggcacgaggc tttcaccccc ccccccggc cattaccgaa gcggatgaaa acaaacacta 60
acgatggcgg cgccgggaag cgaccggctg ctgggcttaa ggcgggagtg accgcttaac 120
cagtgaggga agcactgaag agcgccagtc gacgtgggtg cgacaactcg cggagtctta 180
ggagcaaaac gtctggggcc tgcgagccag gacccttctg aagccttagg tgtctatcgg 240
cgacgtgtac ggtcactgca gctccggagc gcggaaccct cagccaggag gcgcggctgg 300
tcggtcccag gtcccggcct ccgtaatgag agcccggaac cactctttgt gccgcagctt 360
cgcagcatct tggactcaag tgattctcct gcctcagcct cctgagtagc tgggactaca 420
gattcctata ggcaatggaa actgatctca attcccagga cagaaaggac ctggacaagt 480

ttattaaatt ttttgccctc aagactgtcc aagtgattgt ccaggctcgg cttggtgaaa 540
agatttgcac tcgttcatca tcttctccaa cgggttcaga ttggttcaac ttagcaatca 600
aagacatccc agaggttaca catgaagcaa agaaggcact ggcaggacag ctgcctgcag 660
tcgggaggtc catgtgtgtg gagatttcac ttaagacttc tgagggagat tccatggagc 720
tggaaatatg gtgtcttgaa atgaatgaaa agtgtgataa agaaatcaaa gtttcctaca 780
cggtgtacaa cagactgtca ttgctgctga agtcccttct tgctataact agggtgacac 840
cagcctatag gctctccagg aaacaagggc atgaatatgt catattatac aggatatatt 900
ttggagaagt tcagctgagt ggcttaggag aaggcttcca gacagttcgt gttgggacag 960
tgggcacccc tgtgggcacc atcactcttt cttgtgctta cagaattaac ttggcattca 1020
tgtctaccag gcaatttgag aggaccccac ctatcatggg gattattatt gatcactttg 1080
tggaccgtcc ctatcccagc tcctctccca tgcacccctg caattacaga actgctggtg 1140
aggacactgg agtaatatac ccgtctgtag aagactctca agaagtgtgt accacctctt 1200
tttccacctc cccaccatcc cagctgatgg ttcctgggaa ggaaggtggg gtacccctg 1260
ctcccaacca gcctgtccat ggtacccagg ctgaccagga gagactggca acctgcaccc 1320
cttctgacag aacccactgt gctgccacac cctccagtag tgaggatact gaaaccgtat 1380
caaacagcag tgagggacgg gcctcccctc acgatgtctt ggagaccatc tttgtccgaa 1440
aagtgggggc ttttgtcaac aaacccatta accaggtgac cctgacgagt ttggatatac 1500
cctttgccat gtttgctccc aagaatttgg agctggagga taccgatcca atggtgaatc 1560
ctccagattc cccagagact gaatctcctc tccagggcag cctgccttgc agctggcccc 1620
ttccctgcct gctgtcacca tccactgttt gacattccag ctggtggcca agagattggt 1680
gtggaggcag aaagaggaag gagacagtgc caggaggaag aaggaaggag tcccttagct 1740
ctcttcattg tccccttac ttcctgctat cttcttctcc tcttcttctc tctcttgcct 1800
ctatgcctgt atttctggca atatgacagg cctgcctacc caagatcaga actccaaaac 1860
cactcccacc cctgaaggtc gggagggtct gagcagccct ggtggctgcc tgtgctcagg 1920
tcctcagctc catgggaaat aaaaatggca ccctgaatct ctaggatttt gtcacttgga 1980
gtcacagcaa agttctcttc ctcttgtccc cccgttgctg ctccttggtt atagaacatg 2040
gtaaatattt attactttca gagaaaccag atattttata gaggaaatat gtttgaggtg 2100
agttgttttt cacttggaga aggcggaggg ctcttcctgg gacggagacc tcctcctccg 2160
gaggttattg agaatccggg ctgctgcttt gaggatcttc ccaccataca gacagcgaga 2220
tccaagaaga gggctggccg ggggcaaagt cacctcccag tgtggctgca ctggaactga 2280
ctaaaggctt taccttggat agttgcgtat tcctggtgag agccttacat ctcccacagt 2340
ttctgcagag tgactgactc cattctggca gcccaggaag tcctgggtgc taaatgtgat 2400
ggccacatgt agtggttagg ggatgttgtg tgtgtccccc aactgcctgg gtacttgttc 2460
ctgatccctg gggctgtcct gtggagcttt tcctcctgct tgggcctagc taccatctcc 2520
ctctaatccc aggttctcta cactgccctg gggtttacca gctggattgg cttctggttg 2580
agaaatcaaa gctgggcgta tgattgactt aacccttcag gtattgttac ttgaataagt 2640
caagtgccta gcctcaccca cctatgatct gtcctttccc agcctcgctg gtagtcctgg 2700
tcaaggagat ctaggtctac tccattcctc ctggcccacc tggggcattc actggcagca 2760
gctgtgcttc agtggagcag gtggttctca gctgcttgtt agtatactgc atgtgacact 2820
gttcccacat acaaggctga cttctgagga ttggagcagg ctctggcggg gaccagagct 2880
ctgcgtgctg ctgctgccac caagaagtgt tagcagaagc agtagcagcc aactggccct 2940
cctgactttg gcccagagca catgcgtggc ttgctgaacc caggctcagg tttatcccca 3000
aggccccagc tttgagaagg gggaaggccc ctggtaagtt attgatgccc ccatatttca 3060
gctactgctc tctttccaag gccttgcatg gaaaggccta gccattgtct gaggcagcaa 3120
tctttggcat ctacaggtgg cagcagcctt tcaccagggc tccatctgtg aagagtctca 3180
gccatgactt tgagctgagc ttgggagaag taaagcaact gttaaggcca gcccttgccc 3240
ctcagacctg ccatgaaagg aatgagccct agactgactc ctgcagcacc cccgggacag 3300
gctgggacca gctgtttgtc tccaggtgtc agagtccctc ctcctcctcc aacctctcca 3360
acctactttg tttggaaata ccgagctaca cttcaaaatg tattcaaggg atttccaata 3420
aatttttttc tgtaaaaaaa aaaaaaaaaa aa 3452

<210> 157
<211> 902
<212> DNA
<213> Rattus norvegicus

<400> 157
ggggagtgcc gggcggtcgg cgggtcaggg cagcccgggg cctgacgcca tgtcccggaa 60
cctgcgcacc gcgctcattt tcggcggctt catctccctg atcggcgccg ccttctatcc 120
catctacttc cggcccctaa tgagattgga ggagtacaag aaggaacaag ctataaatcg 180
ggctggaatt gttcaagagg atgtgcagcc accagggtta aaagtgtggt ctgatccatt 240
tggcaggaaa tgagagggct gtcatcagct ctgattaaga aaggagattt cttcatgctt 300
tcgattctgc atggggtaca gccagtcacc tcaccagaga atgacggctg gagaagaaaa 360

ctctgtaata ccataaataa gagtgcttgt aataaaagac tgtgcacaag gattaatatt 420
tcccttctta agtatcaaaa gaactctgga acaaattata ccattaggaa ggttttcatg 480
attcagttga ttttccaaaa atgaagctat ctcacccagc tgggtttgga ggagcaatct 540
gcttattatt ctgtcgttac cacttactca agcgagctgt gatatgaata caagcaacca 600
gtgggctcgg gaaggtccgg gtctcttctg ccatcttcca gataagagat ttcagtaaaa 660
aactgccatg ctgagctgcc ttatagagct cttcgaaaat gttcgagttg ataaagctct 720
ttgaggacaa ggtacttcgt gcacctcatg ctgaagattg caccgtgttg gaaaataaat 780
atgaagcaag tcaaactaga tgcatacact tgtgtagaaa tcaataatca attaatagaa 840
gtgaaaaaat agacattaaa atgatttatt tcaaaaaaaa aaaaaaaaaa aaaaaaaaaa 900
aa 902

<210> 158
<211> 5737
<212> DNA
<213> Rattus norvegicus

<400> 158
gtcagatcag ggatcatttt ttttccttcc tctactccct ccccctacc cgcccctccc 60
tccctgtttc ccttccctcc ctccctcccc tctctgctgg gtctgtgcgc tggggcgccc 120
gatcccctcc gcagctggga cgctccgaac tcgaggcagg agtcggctct ccggagcctc 180
gtccctccct tcccccttccc tgcccccttc ccccacccc gactcgggct tggcgcggcg 240
gccagaggaa ccccgagtcc cggcccaggc ccctgagctg gagggatgga aaactcctct 300
gcagcatcag cctcctcgga ggcagggagc agccgctccc aggagatcga ggagctggag 360
cgcttcatcg acagctacgt gctggagtac caggtgcagg ggctgctggc tgacaagacg 420
gagggtgatg gcgagagcga gaggacccag tcccacatct cccagtggac agcggactgc 480
agcgaaccgc tggacagcag ctgttccttc tcccgagggc gagccccccc acagcagaat 540
ggcagcaaag acaactctct ggacatgctg ggcacggaca tctgggcggc caacaccttc 600
gattccttca gtggtgccac ctgggacctg cagccggaaa agctggactt cacccagttc 660
caccgcaaag tccgacacac gcccaagcag cccctgccac acatcgaccg cgaagggtgt 720
ggcaaaggga agctggaaga tggggatggc atcaacctga atgacatcga gaaggtcctt 780
ccagcctggc agggctacca cccgatgccc catgaagtgg agatcgcaca caccaagaag 840
ctgttccgca ggaggagaaa tgatcgaagg cggcagcaga gacctccggg gggcaacaag 900
ccccaacagc atggtgacca ccagccaggc agtgccaaac acaacaggga ccaccagaaa 960
tcctaccagg ggggctcagc accccacccc tcagggaggc ccactcacca tggctacagc 1020
cagaaccggc gctggcacca tggcaacatg aagcacccac caggcgacaa gggggaggca 1080
ggcgcacacc gcaatgccaa agagaccatg accatcgaga acccaaaact ggaggacact 1140
gcaggggaca ccgggcacag cagcctcgag gccccccgca gccctgacac cctggccccg 1200
gtggcttctg agcggctgcc cccacagcag tcaggggggc cagaggttga gacaaaacgt 1260
aaagacagta ttcttcccga gcgcatcggg gagcggccca aaattaccct gctccagtct 1320
tccaaagaca gactgcggcg aaggctaaag gaaaaggatg aagtggccgt ggagacgacc 1380
actccccagc agaacaagat ggacaagctg atcgagatcc tgaacagcat gcggaacaac 1440
agcagcgacg tggacaccaa gctcaccacc ttcatggagg aggcccagaa ctccaccaac 1500
tccgaggaga tgctgggcga gatcgtgcgc acaatctacc agaaggctgt gtccgaccgc 1560
agcttcgcct tcaccgctgc caagctctgc gacaagatgg cgctctttat ggtggagggg 1620
accaagttcc ggagcctgct cctcaacatg ctgcagaagg acttcacggt gcgcgaggag 1680
ctgcagcagc aggacgtgga gcgctggctg ggcttcatca ccttcctgtg tgaggtcttc 1740
ggcaccatgc gcagcagcac aggcgagccc ttccgtgtgc tcgtgtgccc catctacacc 1800
tgcctcaggg agctcttgca atctcaggat gtgaaggaag atgctgtcct ttgctgctct 1860
atggagctgc agagtacagg ccggctgctg gaggaacagc tgcctgagat gatgacagag 1920
ctcctggcca gcgcacggga caagatgctg tgcccctcgg agtccatgct gacccggtcg 1980
ctgctcctag aggtcatcga gctccacgct aacagctgga accctctgac gccccccatc 2040
acgcagtact acaacagaac catccagaaa ctgacagcct gacagccagg gggcctggca 2100
ggcggcccac gggcagctgg ggccctggtg cacagggcca gatggacagg cgggaggaca 2160
ggggtggccc tggcgggaga aagaaatggg gaggagggca ggcagagtcg gtggccagtc 2220
tggagccaga cggggaaggg agcaaatccc tgagaggagt gcccccgcac aagcccccca 2280
gcccgagcat gcaagctcac accaataagg gaagcatgtt tctttttcct ggtggccctg 2340
gccctcccct tcctcactcc cgcctctccc ctccccatca gacccatccc ccacggagct 2400
ttgtgtgagg gatctcatcg ctgtgactcc tcggagacct tggcagcctc gcacgccggg 2460
gcaccgcttg ggtcagaaag gacctcggaa ggctgaaaaa gtgggtcgga gacgggctcg 2520
cattgttccc gcatgctgtc agccgcagtc gccaactggc agcaggcgac gtgtagcaga 2580
tgtccgggag gacaaaggca ggcacggtcc ccaccagccg cccgtaattg acggcctttg 2640
tcagccatgg cagagctgac gctccacctc ccacctccaa gtcctcctca ctgcagcccc 2700
cacagcctca ggcctagggg gtcaggcgca gcgggggaga tggagtttgc agttccactt 2760

gcactctttt gtttattgtg ttttatttt caaaagtcgg ttgctttgaa gtctctttgg 2820
ccaatgaaaa tgcccgtgag gtgatcacac agtcagcact gttgaggacc cccggattag 2880
tgggagatca aacccagctc ccctctagaa gaaggattcg agccacagac agcttgccag 2940
tagccaatta gggtaattgg aaacttctgc cccggcgggg ggtccccgct ggaatcctgt 3000
gttcctcgcc actggcttcc agcgcctctg ttttctcaaa gggctgatac tgtcaccact 3060
gggaccaagt taaacctggt cctggcccca ggggccttgt ggcaaacagg gcacagaacg 3120
agactggcaa attaaaacca aaattctaga tggtgtcttg cgctccacac gcaggtctta 3180
ctggggaaaa ggatgggagt gggggctccc caggactcga ttttagctaa tgcgctgtgt 3240
cactgcccca gctcggacgt agaagcccag ccctccgtga gctcttggga aaggggtgaa 3300
ttcactgggt catggaaggg acagtcaggt gaccagcggg gtcgccagat gaagcttccc 3360
agccgggaaa caagacgggg tttcttggca ggccctggtc ctggggagca ggccctgttg 3420
ttggctggag aggaaggtgt ggggtggaac aggtgtccac atagctccat ctctgggggc 3480
tggagcacac actttgatga gccccccggg aaatgatgtc agagcctagc cgcttcctta 3540
tttgctcttt tattgaggcc gggcaggccc tgggtcactt tggaggcccc tcttggtcca 3600
cactggactg gccgggaggt gatgggcggg gaaggttctc gtgattgatt gattctgagt 3660
ctgagagtgg cgagtgggga gaggcttccc cagttctctc cagctttccc tgcagctgca 3720
acctgccctc tggtcccagg tgtggagcct ttgcctgtct ctaaaaagag cctgttggcg 3780
acaaggtgta gggggcacaa gtttacctga aacaggtcag tggtctctcc caagaagcgc 3840
acgccacctc tggtccctgg ccctgaaccc tgccttcttc ctccctccac ggtttcttcc 3900
cagactttct caagctcctc ctcactgccc ttcctcccca gcccagcctg ggaacacaga 3960
tgccccgcgg gtaggaggcc tcgagggagg agccgggctg atgcggggct gctcagggca 4020
ggccccaggg cgagcttgcc atcgtggcca ggcagcctcc acctgtgctt cagtggcccc 4080
tgccccccctg aagcatgtgg ggtttgtccg ctaggaggag gcaaggcccc cgaagagagg 4140
agagacctgg gagtgggagc tcaggtcagg gaggaggcag gggagtgggg tctcccagac 4200
ccaacggtga gctcagagca agcttcacgc aggacgctcc gaaacactgt gtggaggggg 4260
ctgtgttgtg ggcaccttgg ggcctgattc tccttcctcc gaacgggctc cttgatggcc 4320
tggccacagg ggcagctccc cattggctgt taggaccaga gtgtgaagaa gaagtgaaat 4380
ataaatatgt atacatatat aaatatattt ttaattacat gtcgtgtcac ggtggctcca 4440
gacatactgt ttgcctagtt tattccactg cttgaaagcg cttcctagcc aatctgaaca 4500
acaacacttt aagctgtttt tctaaatgca ggttgctgct ccttttcag atatggaagg 4560
aaaacgttaa gactattttt tttttaaaga aacaacagtc aagcctaaaa tttgagaccc 4620
cgaggcagct tcccgaggga gactgctcag acaggaactg caggacagaa gtggatgccc 4680
cacagaccct ggccccctcc ccaagtccat cccctctctg tggcatgagg aaggccgcgt 4740
ccgagttgac ctctgaatgt atgtgatgag aggcagagct ggatattgca tttctaaggc 4800
ttgcattgct ttcccctcgc ccgcggttct tggcgcatgg aagaggcggt ccagccatct 4860
gatgttgatc ctgtctcagt ctccccactg cctgtcagga tgagttagtc attgtttttc 4920
tccgaggcgg cctgcttgcc acagccctgc tccccaaggc ctggtggctt tgccgaagct 4980
ctgggaccgc agccccagcg aggcccccaa cctcacccag acgaggccag gagccccgcc 5040
accctccacg ggatgtgcac cctcagaccc cattctctct gttcgtcctt ccttgaccag 5100
tctgtaaacc ttcactgttt ggggatcgtc ctgtccatcc atgtaaatgt aaatgttggc 5160
cgagtcggta tttattctga ttgattttta ttttattcta ttattttctc cgagggatga 5220
gggtgggggg tgtgggaagg gtaccacaga tcaggccggg gcagctgtag gggcgggggc 5280
ccagacagcc aggccgccac cagagcagcc ccatggggtg ccccagacgc gggcctccaa 5340
gaagccaagt cccagtctgt tttctggcat cagacaccgg cccgtgttcc ttgtcagaca 5400
gacagactct caggcctgcc tggggagtcg tgtccctcag ctgcagggca ctgtgttggg 5460
aaaccattgg ctgggccttt gaggacacag atcagaagaa agaaagacaa ctttcctctg 5520
cgcggaacac tcacacggaa gggctggccg cctccctgag ccggctggga gtggacgaca 5580
ggacctacct ccccagagca agggcctggg gcttcccgcc aaagctgccg cggaaccccg 5640
ctagtgcgac caccctccct ccgtcggtat gtcctgcttt ccagctgaac ccaaactaca 5700
agtgggttta aaaaaaataa acaccaccac caaaaac 5737

<210> 159
<211> 3606
<212> DNA
<213> Rattus norvegicus

<400> 159
gccttctaaa gcctctgaat gcaattacat gtatttcaga acattctaaa gaagtaataa 60
atcatcatcc agatgtacaa acaaaagatg ataagctcaa aaactcagtt ttggcccaag 120
gtcctggtgc taccagttca gctgcaaata cctgtaaggt acagccactt actcttaaag 180
agactgctga aagttttgga agcccaccaa aagaagaaat gggaaatgaa cacatcagtg 240
tccaccctga aaactcagac tgtatccaag cagatgttaa ctctgatgat tacaagggtg 300
ataaagtata ccatccagaa acaggaagga aaaacgagaa agagaaagtt ggaaggaagg 360

gcaagcatct gttgactgtt gatcagaaac gtggagagca tgttgtctgt ggcagcacac 420
gtaataatga gtcagagagc actttggatt tagaaggctt ccaaaatccc acagctaaag 480
agtgtgaggg acttgccact ttagataaca aggctgatct tgatggagaa agtacagaag 540
gtactgagga actagaagac tctctaaacc actttaccca ctcagtacag ggccagacat 600
cagaaatgat tccctctgat gaagaggagg aggacgacga agaagaggag gaggaagaag 660
aacctaggct caccattaac caaagggaag atgaagatgg catggctaat gaagatgagt 720
tagacaacac ctacactggg tcaggggatg aggacgccct atctgaagag gatgatgagt 780
taggcgaagc tgctaagtat gaagacgtga aagaatgtgg aaaacatgta gaaagagctc 840
tcctagtgga acttaataaa ataagtctca aggaagaaaa tgtatgtgaa gaaaaaaatt 900
cacctgtgga tcagtctgat ttttttatg aattcagtaa acttatcttc accaaaggca 960
agtctcctac ggtagtgtgc agcttatgca aacgagaggg tcatctaaag aaggactgtc 1020
ctgaagactt caaaagaatc cagctagaac ctctgccacc attaacaccc aagtttttaa 1080
atatcttaga tcaagtctgt atccagtgtt ataaggattt ttctccaaca attatagaag 1140
atcaggctcg tgaacatatt cggcaaaacc tagaaagttt cataagacag gactttccag 1200
gaactaaatt gagcctgttt ggctcctcca aaaatggatt tgggttcaaa cagagtgacc 1260
ttgacgtctg tatgacaatt aatggacttg aaactgctga gggattggac tgtgtcagaa 1320
ctattgaaga attagcaaga gtcctcagaa aacattcagg tctgagaaac atcttaccta 1380
ttacaacagc aaaggtgcca attgtgaagt tcttccattt gagaagtggt ctggaagtag 1440
atatcagttt gtataacaca ttggcccttc ataacacaag gcttttatct gcttattccg 1500
ccattgatcc cagagtgaag tatttgtgct ataccatgaa agtatttaca aagatgtgtg 1560
atattggtga tgcatctaga ggcagcttat catcgtatgc atatactctt atggtgctat 1620
attttctcca gcagaggaat ccaccagtca ttcctgtcct tcaagagata tacaaaggtg 1680
aaaagaaacc tgaaatattt gttgatggct ggaatattta ttttttgat caaatagatg 1740
aactgcctac ctattggtca gaatgtggaa aaaatacaga atctgttggg cagttatggt 1800
tgggccttct tcgtttctac acagaggaat ttgattttaa agaacatgtt attagcatca 1860
ggagaaaaag tctgcttaca acttttaaga aacagtggac ctcaaaatac attgttattg 1920
aagatccctt tgatttgaat cataatcttg gagctggatt atcaaggaaa atgacaaatt 1980
ttataatgaa ggcttttatc aatggtagaa gagtatttgg tattcctgtc aagggatttc 2040
caaaggacta cccctcaaaa atggaatact tttttgatcc agatgtgtta actgaaggag 2100
agctggcccc aaatgataga tgttgtcgaa tttgtggaaa aatcggacac ttcatgaagg 2160
actgtcctat gaggagaaaa gtaagacggc ggcgagatca ggaagatgcc ctgaaccaaa 2220
gataccctga gaacaaggaa aaaagaagca aagaggacaa agaaattcac aacaagtaca 2280
cagaaaggga ggtgtcaaca aaagaagata agcccataca gtgcacacct cagaaagcca 2340
agccaatgcg ggcagctgct gacctgggga gggagaagat cctcaggcca ccagtagaaa 2400
aatggaagag acaggatgac aaagacttaa gagaaaaacg ttgttttatt tgtggaagag 2460
aagggcacat taaaaaggaa tgcccacagt ttaaaggctc ttcaggtagc ctttccagta 2520
aatatatgac tcagggaaaa gcctcagcga agaggaccca gcaggaatca tgagggaagg 2580
aaaatgcagc actctaaatg gccactcagg cgttcctatt cactcggaaa attaggttca 2640
tttcacagga cacagcagtg tagatcaggc ttcaacttaa catttaaggg aaatgtcaga 2700
ttttttttta atttaatgaa attgttaatg aggaaaaatt tttaatatag tcttatctac 2760
cacacatccc catagattta aggattttaa tagaaagtca tgatgtatgt atttaagcca 2820
cgttaaaaga aaaaatataa ctatggaccg gtattcagtg aatacagttt catggttttt 2880
aattctttca aagcacatta aaaatggtgt gctgataaac cccaagtaaa ttaacccttt 2940
ttccgtataa atccattttt tgttttgaag aggggaaatt atatttattg ttgtttactg 3000
aatcctggtg tgaaagcata tcagatatgt atgaactgct actgctgtac ttccgattta 3060
cggacatcat tttattgcta tttgtagacg tgataacatg aacatgagta cctatttatg 3120
tgggccttca gtggatgggc agtgccactc aggtctctgg ggtttccctc tctaatttta 3180
agtaaattga catataacta ctatgcttat aaaaatgaag taaggaaaac aagtagtcct 3240
gtttgccact aaaaacattt tcaaaggaaa aataaaatga aagtactttt tacttttttat 3300
gatactcaga aattaggatg aagaactttt aaaattgctg aagatcaaag aggttatctc 3360
tgccagtcac aagtgtggct ggtgtcattc tgggtctgac tggagccctc ctggactgtt 3420
tctttaattt caaaagccct gcagacatag tacctggtca gaactatgcc tcggtttatt 3480
tatcattttg aaataaaatc aaaatttcaa cctgtaaaaa aaaaaaaaaa aaaaaaaaaa 3540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3600
aaaaaa 3606

<210> 160
<211> 1203
<212> DNA
<213> Rattus norvegicus

<400> 160
ggcacgaggc cgccttctgc atcgcggctt cggcggcttc cacctagaca cctaacagtc 60

gcggagccgg ccgcgtcgtg aggggtcgg cacggggagt cgggcggtct tgtgcatctt 120
ggctacctgt gggtcgaaga tgtcggacat cggagactgg ttcaggagca tcccggcgat 180
cacgcgctat tggttcgccg ccaccgtcgc cgtgcccttg gtcggcaaac tcggcctcat 240
cagcccggcc tacctcttcc tctggcccga agccttcctt tatcgctttc agatttggag 300
gccaatcact gccacctttt atttccctgt gggtccagga actggatttc tttatttggt 360
caatttatat ttcttatatc agtattctac gcgacttgaa acaggagctt ttgatgggag 420
gccagcagac tatttattca tgctcctctt taactggatt tgcatcgtga ttactggctt 480
agcaatggat atgcagttgc tgatgattcc tctgatcatg tcagtacttt atgtctgggc 540
ccagctgaac agagacatga ttgtatcatt ttggtttgga acacgattta aggcctgcta 600
tttaccctgg gttatccttg gattcaacta tatcatcgga ggctcggtaa tcaatgagct 660
tattggaaat ctggttggac atctttattt tttcctaatg ttcagatacc caatggactt 720
gggaggaaga aattttctat ccacacctca gtttttgtac cgctggctgc ccagtaggag 780
aggaggagta tcaggatttg gtgtgccccc tgctagcatg aggcgagctg ctgatcagaa 840
tggcggaggc gggagacaca actggggcca gggctttcga cttggagacc agtgaagggg 900
cggcctcggg cagccgctcc tctcaagcca catttcctcc cagtgctggg tgcgcttaac 960
aactgcgttc tggctaacac tgttggacct gacccacact gaatgtagtc tttcagtacg 1020
agacaaagtt tcttaaatcc cgaagaaaaa tataagtgtt ccacaagttt cacgattctc 1080
attcaagtcc ttactgctgt gaagaacaaa taccaactgt gcaaattgca aaactgaaaa 1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
aaa 1203

<210> 161

<400> 161
000

<210> 162
<211> 2703
<212> DNA
<213> Rattus norvegicus

<400> 162
cgcgccggga acagccagtc ggtgcctaac gcgagtgtat ctcgagagag aagcgatcaa 60
cagctgccgg tctgcgcctg cgcggcgacg gggcgtggcc gcgggcgagt ggggccaagg 120
aggcagccgg gagcgggggc gcaggtgtta ctggttgcgt cgggtcacgt gggcgcgcag 180
cagaccgcgg tgcagcccgt tcgctcacac aaagcccaga cgcggagaaa atggcggcag 240
gggtcgaagc ggcggcggag gtggcggcga cggagatcaa aatggaggaa gagagcggcg 300
cgcccggcgt gccgagcggc aacggggctc cgggccctaa gggtgaagga gaacgacctg 360
ctcagaatga gaagaggaag gagaaaaaca taaaaagagg aggcaatcgc tttgagccat 420
atgccaatcc aactaaaaga tacagagcct tcattacaaa catacctttt gatgtgaaat 480
ggcagtcact taaagacctg gttaaagaaa aagttggtga ggtaacatac gtggagctct 540
taatggacgc tgaaggaaag tcaaggggat gtgctgttgt tgaattcaag atggaagaga 600
gcatgaaaaa agctgcggaa gtcctaaaca agcatagtct gagcggaaga ccactgaaag 660
tcaaagaaga tcctgatggt gaacatgcca ggagagcaat gcaaaaggtg atggctacga 720
ctggtgggat gggtatggga ccaggtggcc caggaatgat tactatccca cccagtatcc 780
taaataatcc caacatccca aatgagatta tccatgcatt acaggctgga agacttggaa 840
gcacagtatt tgtagcaaat ctggattata aagttggctg gaagaaactg aaggaagtat 900
ttagtatggc tggtgtggtg gtccgagcag acattcttga agataaagat ggaaaaagtc 960
gtggaatagg cactgttact tttgaacagt ccattgaagc tgtgcaagct atatctatgt 1020
tcaatggcca gctgctattt gatagaccaa tgcacgtcaa gatggatgag agggccttac 1080
caaaaggaga tttcttccct cctgagcgtc cacaacaact tccccatggc cttggtggta 1140
ttggcatggg gttaggacca ggagggcaac ccattgatgc caatcacctg aataaaggca 1200
tcggaatggg aaacataggt cccgcaggaa tgggaatgga aggcatagga tttggaataa 1260
ataaaatggg aggaatggag gggccctttg gtggtggtat ggaaaacatg ggtcgatttg 1320
gatctgggat gaacatgggc aggataaatg aaatcctaag taatgcactg aagagaggag 1380
agatcattgc aaagcaggga ggaggtggag gtggaggaag cgtccctggg atcgagagga 1440
tgggtcctgg cattgaccgc ctcgggggtg ccggcatgga gcgcatgggc gcgggcctgg 1500
gccacggcat ggatcgcgtg ggctccgaga tcgagcgcat gggcctggtc atggaccgca 1560
tgggctccgt ggagcgcatg ggctccggca ttgagcgcat gggcccgctg ggcctcgacc 1620
acatggcctc cagcattgag cgcatgggcc agaccatgga gcgcattggc tctggcgtgg 1680
agcgcatggg tgccggcatg ggcttcggcc ttgagcgcat ggccgctccc atcgaccgtg 1740
tgggccagac cattgagcgc atgggctctg gcgtggagcg catgggccct gccatcgagc 1800
gcatgggcct gagcatggag cgcatggtgc ccgcaggtat gggagctggc ctggagcgca 1860

tgggccccgt gatggatcgc atggccaccg gcctggagcg catgggcgcc aacaatctgg 1920
agcggatggg cctggagcgc atgggcgcca acagcctcga gcgcatgggc ctggagcgca 1980
tgggtgccaa cagcctcgag cgcatgggcc ccgccatggg cccggccctg ggcgctggca 2040
ttgagcgcat gggcctggcc atgggtggcg gtggcggtgc cagctttgac cgtgccatcg 2100
agatggagcg tggcaacttc ggaggaagct tcgcaggttc ctttggtgga gctggaggcc 2160
atgctcctgg ggtggccagg aaggcctgcc agatatttgt gagaaatctg ccattcgatt 2220
tcacatggaa gatgctaaag gacaaattca acgagtgcgg ccacgtgctg tacgccgaca 2280
tcaagatgga gaatgggaag tccaaggggt gtggtgtggt taagttcgag tcgccagagg 2340
tggccgagag agcctgccgg atgatgaatg gcatgaagct gagtggccga gagattgacg 2400
ttcgaattga tagaaacgct taagcagttg ccttttttaa acatcgatac gagacctctg 2460
aatttgtatt ttttcttgtt aaccatttta atttgttggc tggatgtata aagatgttta 2520
aaaaattcag ttgctttttg gggtaatttg aattactttt ttaatgactg gggttccatt 2580
tgactgtttg cattgagatt gcaatgtgcg caatttttt tgtagttgtg gcatcttgtt 2640
gacatcgaat atgactttga taataaatac cggttcctga aaaaaaaaaa aaaaaaaaaa 2700
aaa 2703

<210> 163

<400> 163
000

<210> 164
<211> 5742
<212> DNA
<213> Rattus norvegicus

<400> 164
ggcggtgcaa gagagctgag ggaggcgcga gggcgcggag ttccaggtcg agcagttagg 60
ccgcgagcga ctgcggcgcc gagccgatga gtaacccgaa gcccctagag gagtggtcac 120
ctgcctgagg gcacttctgt cccaccagca tcagaccagg ccgcaccgag tccccggcac 180
catgtttggg aagaggaaga agcgggtgga gatctccgcg ccgtccaact tcgagcaccg 240
cgtgcacacg ggcttcgacc agcacgagca gaagttcacg gggctgcccc gccagtggca 300
gagcctgatc gaggagtcgg ctcgccggcc caagcccctc gtcgaccccg cctgcatcac 360
ctccatccag cccggggccc ccaaggggga gcctcatgac gtggccccta acgggccatc 420
agcgggggcc ctggccatcc cccagtcctc ctcctcctcc tcccggcctc ccacccgagc 480
ccgaggtgcc cccagccctg gagtgctggg accccacgcc tcagagcccc agctggcccc 540
tccagcctgc acccccgccg cccctgctgt tcctgggccc cctggccccc gctcaccaca 600
gcgggagcca cagcgagtat cccatgagca gttccgggct gccctgcagc tggtggtgga 660
cccaggcgac ccccgctcct acctggacaa cttcatcaag attggcgagg gctccacggg 720
catcgtgtgc atcgccaccg tgcgcagctc gggcaagctg gtggccgtca agaagatgga 780
cctgcgcaag cagcagaggc gcgagctgct cttcaacgag gtggtaatca tgagggacta 840
ccagcacgag aatgtggtgg agatgtacaa cagctacctg gtgggggacg agctctgggt 900
ggtcatggag ttcctggaag gaggcgccct caccgacatc gtcacccaca ccaggatgaa 960
cgaggagcag atcgcggccg tgtgccttgc agtgctgcag gccctgtcgg tgctccacgc 1020
ccagggcgtc atccaccggg acatcaagag cgactcgatc ctgctgaccc atgatggcag 1080
ggtgaagctg tcagactttg ggttctgcgc ccaggtgagc aaggaagtgc cccgaaggaa 1140
gtcgctggtc ggcacgccct actggatggc cccagagctc atctcccgcc ttccctacgg 1200
gccagaggta gacatctggt cgctggggat aatggtgatt gagatggtgg acggagagcc 1260
cccctacttc aacgagccac ccctcaaagc catgaagatg attcgggaca acctgccacc 1320
ccgactgaag aacctgcaca aggtgtcgcc atccctgaag ggcttcctgg accgcctgct 1380
ggtgcgagac cctgcccagc gggccacggc agccgagctg ctgaagcacc cattcctggc 1440
caaggcaggg ccgcctgcca gcatcgtgcc cctcatgcgc cagaaccgca ccagatgagg 1500
cccagcgccc ttcccctcaa ccaaagagcc ccccgggtca cccccgcccc actgaggcca 1560
gtaggggccc aggcctccca ctcctcccag cccgggagat gctccgcgtg gcaccaccct 1620
ccttgctggg ggtagatgag accctactac tgaactccag ttttgatctc gtgactttta 1680
gaaaaacaca gggactcgtg ggagcaagcg aggctcccag gacccccacc ctctgggaca 1740
ggccctcccc catgttcttc tgtctccagg aagggcagcg gccctcccat cactggaagt 1800
ctgcagtggg ggtcgctggg ggtggagaga acactaagag gtgaacatgt atgagtgtgt 1860
gcacgcgtgt gagtgtgcat gtgtgtgtgt gcaaaggtcc agccaccccg tcctccagcc 1920
tgcaaggggt gtctggcgcc ttgcctgaca cccagcccca tctccccctg agccattgtg 1980
ggggtcgatc atgaatgtcc gaagagtggc cttttcccgt agccctgcgc ccccttttctg 2040
tggctggatg gggagacagg tcagggcccc ccaccctctc cagcccctgc agcaaatgac 2100
tactgcacct ggacagcctc ctcttttcta gaagtctatt tatattgtca ttttataaca 2160

ctctagcccc tgcccttatt gggggacaga tggtccctgt cctgcggggt ggccctggca 2220
gaaccactgc ctgaagaacc aggttcctgc ccggtcagcg cagccccagc ccgcccaccc 2280
ctgcctcgag ttagttttac aattaaaaca ttgtcttgtt ttgtgtctgt gtgcgatgtg 2340
tgggggggcag ggggccctgc ccggctgtct tgggtgggaa tttgcaggga gagggtctgg 2400
atctgggagc aaaccacgat tccagccaag gcagggcaag ggtggggtgg ggagtgggga 2460
gttcaggtca tagcagccag taagctcccc cagcctgcca ctccccagaa tggggcagga 2520
ttgtccccac ccctggaagc agccagtttg ccacagtcca tgtgcagact gatcccagtt 2580
tgccaaatct gcaatttcct ggaacctttt aaaggctgtc ttgagcgcgt ttggtgagta 2640
ggagctaacc caagttagta aattgaaggc catttggcaa attggtcagt gggcagatgg 2700
gcttttgggg attgactgag gctgactggc ctggagctgc tggcttcgga gagacaccct 2760
gtgaagtgtg tccttccacg caggagccca gagccgagcc cacgctgggg ggaatctgac 2820
tggcatggag gtggccatgc caccatcgct gctgcagctg catcctggca ctttgcgcct 2880
caggccctgt tgggctccac tttctgcatc ctccccagcc cccagggagg cagtggagtg 2940
gggagagagc caggagtgag cctccgtccc caaagccagc caggcgtcat cagcaccaga 3000
gacctcagcc tggtcctctc gggaagtgag tggccagggc agagattcca ggttagtcca 3060
cgcctcccac ccttcacagg tcctgacccc aagaatcaga gcactgtgtg tgtggcaggg 3120
cctatgccaa gtgcaaacac agcctagatg gatcatcaca gagtgaaacc cagcggtgca 3180
agcagctgtg ctctctgcga tgtattggag gcttaggtga ggtggatgcc tttctggaaa 3240
aaaaaaaaat gctaacattg gcaaaagaag aaatagaaaa caagaccaaa ataactgtct 3300
cctcactgca cacacactcc agaataaata aaaggtttca ggcttgaatg cactttcaaa 3360
tgagattttt ttttttttt tgagacggag tatcgctctg tcgcccaggc tggagtgcgg 3420
tggcacggtc ttggctcgct gcaacttctg cctcctgggt tcaagcgatt ctcctgcctc 3480
agcctcccag gtggctggga ttgcaggcgc ttgccaccac gccgggctag ttttttgtat 3540
tttgggtaga gactgggttt cgccatcttg gccagactgg tcttgaactc ctgacctcgt 3600
gatccgccca cctcagcctc ccaaggtgct gggattgcag gcatgagcca ccatgcctgg 3660
cctcaaatga ggtttaccag actttgaagg agcaggtaat tccttctacc ttgtgaacaa 3720
gtcgttccag aaagatagca gctcaggagg cctctgtgac catggttcca gacccagata 3780
aggacggcaa agaacagagc atctcagaaa cgcaaggctc acagccaggg tgcccggcga 3840
ccccacgggc actgagaaca gctagctcta ggagctccac tctcctgctg aagaaaccac 3900
gggctcagag acggggagct ccctcgccca gccacatctg tgaccccacg gtaactctgc 3960
tggttttggt gccttcagtc actcactgca ggtttgtttt gttttgtttt gttttgtttt 4020
gagttttttt gttttttgtt ttttgttttt agagacggga tgttgctatg ttgcctaggc 4080
tggtttcgaa ctcctggcct caggggatcc tccctccttg gccccgcaag gtgctgggat 4140
tgcaggcgtg agccgccgtg cccggcccgc tcactgcagt ttgaaggcat ggctttgggt 4200
ggcgtggggt gaaagctgcc cgaggccccg ttcctcccca cgtggctgcc tcctgccaga 4260
gccagtcagg aaaacagacc ccaactagag ttgtttcaaa tggcagggat ttggtaccgg 4320
tggttggatc atgacaaagc tctgagaagg ctggaggagc cacagagtgc caagtgccca 4380
gcaatcatta gaggaaggag gctgctgcca cctgtgtggc tagaggaaca gaggggccaa 4440
tggcattccc caaaccccac tctcgcctct gtctggccag agcagaatgg cttcttccag 4500
cttcccaccc tggactccca cccaggagcc tcctcctggc agacccttcc tgaccccacc 4560
ggcccggggg gtctacagat ccatgtttca ggcgtccgcc tggagcggaa caggggagtg 4620
cttaggacaa gggtggtgcc agaggatcca ctctgcccac atttagttga ccagctgagg 4680
cactccacgg gaatgaatga ctctcgacag gtgccggagg tgaggagggg cccggaggcc 4740
caggaggggc acagggatgg attcgtccgc ctgggggctg gaggtgtgtt tacagagccc 4800
caaaataaac aatgcaacca ggtcagacca gcggttctca cacagtgtgg ttcccagacc 4860
agcagcatca ctgggagctt actggacacg caaataaatc cctgtgtgcc accccagctg 4920
catcagatgc tggtggggcc cagtgatctg tatttaacac accctccggg ggatgccggt 4980
gcccactcac gtttgagaac ccctgcgatc cacgactgcc ctcccgtgta aaaggcccac 5040
ctctgtggga ctccaagtca tcagcaccct agggtccttc cgtctttttc cttcctcctg 5100
ggacacctgc ctctcccatg tcgtattaga gaattcctta tgctcccaag tgggcacggg 5160
gagaggaagg cactcctctt taaggaccga cccagaggtt ttgccattgc ttcactggcc 5220
agagcttagt cacgcagcct cacccagagg caagggaggt tggaaaatgt agtgtttgtg 5280
tgtgtctaac acaaattcta ttaccatgca gtcaggattc tccactcttg ctctttcatt 5340
agatttgctg ggcttcaccc tggactttct gatttagtga cagaacagag aacccagagg 5400
cagacccaga tgtgtacaag ggcttcatat acaatcagga gatttaataa tcatgctagg 5460
ggccgggtgc agtggctcac gcctgtaatc ccaagcactt tggggagccg aggcaggcgg 5520
atcacttgag gtcaggagtt tgagaccagc ctgggcaaca aagtgagacc ctgtctctac 5580
taaaaataac aaaaattagc cgggcgtggt ggtgggtgcc tgtaatccca gctcctcggg 5640
tggctgaggc atgagaatca cttgaaccca ggaggcagag gtttcagtga gctgagatca 5700
catcactgca ctccagcctg ggtgacagag tgagattccg tc 5742

<210> 165
<211> 3709

<212> DNA
<213> Rattus norvegicus

<400> 165
gggctgcagg aattccccca cagagggagc atgacttcgg caacttcacc tatcattctg 60
aaatgggacc ccaaaagttt ggaaatccgg acgctaacag tggaaaggct gttggagcca 120
cttgttacac aggtgactac acttgtcaac acaagcaaca aaggcccatc tggtaaaaag 180
aaagggaggt caaagaaagc ccatgtacta gctgcctctg tagagcaagc cactcagaat 240
ttcctggaaa agggtgaaca gatcgctaag gagagtcaag atctcaaaga agagttggtg 300
gctgctgtag aggatgtgcg caaacaaggt gagacgatgc ggatcgcctc ctccgagttt 360
gcagatgacc cttgctcgtc ggtaaagcgc ggcaccatgg tacgggcggc aagggctttg 420
ctctccgcgg tgacacgctt actcatcctg gcggacatgg cagatgtcat gagactttta 480
tcccatctga aaattgtgga agaggccctg gaagctgtca aaaatgctac aaatgagcaa 540
gaccttgcaa accgttttaa agagtttggg aaaaagatgg tgaaacttaa ctatgtagca 600
gcaagaagac aacaggagct gaaggatcct cactgtcggg atgagatggc agccgcccga 660
ggggctctga agaagaatgc cacaatgctg tacacggcct ctcaagcatt tctccgccac 720
ccagatgtcg ccgctacgag agccaaccga gattatgtgt tcaaacaagt ccaggaggcc 780
atcgccggca tctccaatgc tgctcaagct acctcgccca ctgacgaagc caagggccac 840
acgggcatcg gcgagctggc tgcggctctt aatgagtttg acaataagat tatcctggac 900
cccatgacgt tcagcgaggc caggttccgg ccgtccctgg aggagaggct ggagagcatc 960
atcagcggcg cagcgctgat ggccgactcc tcctgcacgc gagacgaccg gcgcgagagg 1020
atcgtggcgg agtgcaacgc cgtgcggcag gcgctccagg acctgctcag cgagtacatg 1080
aataatactg gaaggaaaga aaaaggagat cctctcaaca ttgcgattga taagatgact 1140
aagaaaacaa gagatctaag gagacagctt cggaaagcag tgatggatca catatctgac 1200
tctttcctgg aaaccaatgt tcctttgcta gttctcattg aggctgcaaa gagcggaaat 1260
gaaaaggaag tgaaagaata tgcccaagtt ttccgtgagc atgccaacaa actggtagag 1320
gttgccaatt tggcctgttc catctccaac aatgaagaag gggtgaaatt agttcggatg 1380
gcagccaccc agattgacag cctgtgtccc caggtcatca atgccgctct gacactggct 1440
gcccggccac agagcaaagt tgctcaggat aacatggacg tcttcaaaga ccagtgggag 1500
aagcaggtcc gagtgttgac agaggccgtg gatgacatca cctcagtgga tgacttcctc 1560
tctgtctcag aaaatcacat cttggaggat gtgaacaagt gtgtgatagc cctccaagag 1620
ggcgatgtgg acactctgga ccggactgca ggggccatca ggggccgggc agctcgagtc 1680
atacacatca tcaatgctga gatggagaac tatgaagctg gggtttatac tgagaaggtg 1740
ttggaagcta caaaattgct ttctgaaaca gtgatgccac gcttcgctga acaagtagag 1800
gttgccattg aagccctgag tgccaacgtt cctcaaccgt ttgaggagaa tgagttcatc 1860
gatgcctctc gcctggtgta tgatggcgtt cgggacatca gaaaggctgt gctgatgatc 1920
aggaccccag aagaactaga ggatgattct gactttgagc aggaagatta tgatgtgcgt 1980
agagggacaa gtgttcagac tgaggatgac cagctcattg cagggcagag cgcacgggcc 2040
atcatggcgc aactaccgca ggaggagaag gcaaaaatag ctgagcaggt ggagatattc 2100
catcaagaga aaagcaagct ggatgcagaa gtggccaaat gggacgacag cggcaatgat 2160
atcattgtac tggccaagca gatgtgtatg atcatgatgg aaatgacaga cttcacaaga 2220
ggcaaaggcc cattgaaaaa tacatctgat gtcattaatg ctgccaagaa aattgccgaa 2280
gcaggttctc gaatggacaa attagctcgt gctgtggctg atcagtgtcc tgattcagca 2340
tgtaagcagg atttattagc ctaccttcaa cgaattgcct tgtattgcca tcagcttaat 2400
atctgcagca aggtgaaggc agaagtgcag aatctgggag gagagctcat tgtgtcaggg 2460
acaggagttc agagcacttt cactaccttt tatgaggtag attgtgatgt catagatggg 2520
ggcagggcta gtcaactttc tacccacctc ccaacctgtg ctgagggagc tccgatcggg 2580
agtggaagca gtgattcctc catgctggac agtgccacat cgcttatcca ggcagctaaa 2640
aacctgatga atgctgttgt cctcacggtg aaagcatcct atgtggcctc aaccaaatac 2700
cagaaggtct atgggacagc agctgtcaac tcacctgttg tgtcttggaa gatgaaggct 2760
ccagagaaga agccccttgt gaagagagaa aagcctgaag aattccagac acgagttcga 2820
cgaggttctc agaagaaaca catttcgcct gtacaggctt taagtgaatt caaagcaatg 2880
gattccttct aggacgatag gttttaacaa gaaagctttt tctttctttt ctttctttct 2940
ttttcttttt aattccattt ttgtatgcat acctgccagc tcgtatgcct ctggcatggg 3000
gaaattaagg gaacagtgtc tgtttgcatg taagatgaga tgagatcaat actactgatc 3060
catctgtagc ctgggaagga gacaggacat tcctgtacta aggtggcaca gagctgtcct 3120
ttgcaacatt ctcataaaat tgggcacaga gttcgcattg gcgcaatatt tatgggagtg 3180
ggagggatgg ggaaaataaa cttaactcta caaaagcaaa ctctaatgca tgcaagaatc 3240
attaggttgg caggtatatg cataagtgaa aaatctggaa gtgtaatggt agaacataaa 3300
acttgtattg cttctgtttc agtgcaaaaa tgtactagcc aatacgctta agtgtgtggc 3360
ccatgaattg aacaatttaa ccttgaagtc tatatccgtg atattatgtc gatttttaac 3420
tgaggggaaa ttaactagtc cagcctaaaa tgcttctttt aatctgcatt ctgtttcctc 3480
ttctagttgt gccattacta gtgatcatgt ttttttcccc cctttaatga aaacaataaa 3540

catctatttg agacaattaa aatccttctg ggggcactgg aagcacaata cggtgaccaa 3600
tcttgctttc attttttttt ctttttaatt tgaaccatga ttttgctaga aatagaaggc 3660
ccagtggtgg aatattagag ggaaggaaac tgacaacgtg tgaaagtta 3709

<210> 166
<211> 1874
<212> DNA
<213> Rattus norvegicus

<400> 166
ccggtgatgg cggctggtga tggggacgtg aagctaggca ccctggggag tggcagcgag 60
agcagcaacg acggcggcag cgagagtcca ggcgacgcgg gagcggcagc ggaaggggga 120
ggctgggcgg cggcggcgtt ggcgcttctg acgggggcgg gggaaatgct gctgaacgtg 180
gcgctggtgg ctctggtgct gctgggggcc taccggctgt gggtgcgctg ggggcggcgg 240
ggtctggggg ccggggccgg ggcgggcgag gagagccccg ccacctctct gcctcgcatg 300
aagaagcggg acttcagctt ggagcagctg cgccagtacg acggctcccg caacccgcgc 360
atcctgctcg cggtcaatgg gaaagtcttc gacgtgacca aaggcagcaa gttctacggc 420
ccggcgggtc catatggaat atttgctggt agggatgcct ccagaggact ggccacattt 480
tgcctagata aagatgcact tagagatgaa tatgatgatc tctcagattt gaatgcagta 540
caaatggaga gtgttcgaga atgggaaatg cagtttaaag aaaaatatga ttatgtaggc 600
agactcctaa aaccaggaga agaaccatca gaatatacag atgaagaaga taccaaggat 660
cacaataaac aggattgaac tttgtaaaca accaaagtca ggggccttca gaactgcaat 720
tcttactccc tttcacagac tgtccggagt ctttgggttt gattcacctg ctgcgaaaaa 780
cattcaacaa attgtgtaca agataaatta atctcactat gaagatttga ataactagac 840
attatttatg ctgccaaact catttgttgc agttgtttgt aatgtctagt ggggcttcat 900
catcctgaaa agaaggagac agggattttt ttaaagagca agaaagtcac aatattactt 960
ctttccttcc ttttttcctt ctttcctttc ttctttctct ttctttcttt ttaaaatata 1020
ttgaagacaa ccagatatgt atttgctact caagtgtaca gatctcctca agaaacatca 1080
agggactcct gtgtcacata ctgtgttttt attttaacat gggtgaggga ggcgacctga 1140
tcaggggagg tgggggtaca catcaatttg agttgttcag gctactgaaa cattaaaatg 1200
tgaattccca aacttttctt tttggctttg tcagggaaaa gaaaaatatc tttataaaga 1260
aatctttgga aattaggaga aggaatttca ggtgggttta agtcagagct agttccccaa 1320
cagaaagatc atttgaaacc agtttttatc ccttctcttt ccttcccttt ccctaaatca 1380
aatcaatatt aattgtgcct tatttcactt aacatagact tgaattattt ttagggaaag 1440
cccctataat gaattcagaa atcactacaa gcagcattaa gactgaagtt ggaatattct 1500
gttgaccata aaaccttgat atcattctgt gtatatagaa tgtaaaagga atattacagt 1560
gttaactgcc atatatgtaa tatacacaaa ctcaattagc attgtaatgg ccaaatgcat 1620
tcccccatgc ttttctgttt tcaaaaaaat tgaaaaacaa atcaactctt atccccaaca 1680
gctgcctaat tttaggagtc tgaccctcca catctcactg gtgtgggtgc atggggctgt 1740
ggagtgggtg tcagtatgga tgtgtctgaa tgtgtgaggc cttggaaggg actctttctg 1800
cagatactgt aaatacaagt accattttaa taaagcatgt acaataaacc aaaaaaaaaa 1860
aaaaaaaaaa aaaa 1874

<210> 167
<211> 2570
<212> DNA
<213> Rattus norvegicus

<400> 167
ggactcgagc gctccgattg gagttagggc ctgcttgtct gcgtgctgcg aagtccgcgg 60
ctgcccccgg ggccctagtc gttgggttcc agggtccttc acgttccatt cccaggctgg 120
tctgagctcc ggggccgtgg tcccgctgcc tcctccggtc gtcgtgcgga agctgcgacg 180
caggcagacc atggcagagt tctcccagaa acgggggaag cggcgtagcg acgaagggct 240
gggcagcatg gtggacttcc tcctggccaa tgcccgcctg gtgctgggcg tgggcggggc 300
tgctgtgctg ggcattgcca ccctggccgt gaagcggttc attgacaggg ccactagccc 360
gcgggatgag gatgacacca aggcagacag ctggaaggaa ctgagcctgc tcaaggccac 420
accacacctg cagccccggc ctccacctgc tgcccttagc cagccagtgt tgcccttggc 480
cccctcgtcg tctgccccag aagggcctgc agaaactgat cctgaggtga caccacagct 540
cagctcccca gcaccgctgt gtctgacact gcaggagagg ctgctggcct tcgagcggga 600
ccgtgtgacc atcccagcag cccaggtggc tttggccaaa cagctggctg gcgacatcgc 660
cctggagctg caggcctact ttcggagcaa gttcccggaa ctgccctttg gggcattcgt 720
gcctgggggg ccgctctacg acgggctgca ggcgggggct gcggaccatg tgcgtctcct 780
ggtgccactg gtgctggagc cgggcctgtg gagcctggtg ccgggcgtgg acactgtggc 840

gagggaccct cgctgctggg ccgtgcgcag gacgcagctt gagttctgcc cccgtgggag 900
cagcccctgg gaccgcttcc tggtcggggg ctacttctcc tcccgcgtcc tgctggagct 960
actccgcaag gcgctggctg cttctgtcaa ctggccggcc attggcagcc ttctcgggtg 1020
cctgatccgg cccagcatgg cctcggagga gctgctgctc gaggtgcagc acgaacgcct 1080
ggagctcact gtggctgtgc ttgtggcagt ccctggggtc gatgctgacg accgcctcct 1140
cttggcctgg cccctggagg ggctggcggg gaacctctgg ctgcaggacc tgtatccagt 1200
ggaggctgct aggctgcgag ccctggacga ccatgacgct gggactcgcc ggcggctgct 1260
gctgctgctg tgtgctgtct gccgtggttg ctcggctctg gggcagctag gccggggtca 1320
cctgacccag gtggtcctgc gtctggggga ggacaacgtg gattggacgg aggaggcctt 1380
gggtgagcgc ttcctgcaag ccctggagct gctcatcggc agcctggagc aggccagcct 1440
gccctgccac ttcaacccca gcgtgaacct cttcagcagc ttgcgtgagg aggagattga 1500
cgacattggc tatgcgctat acagtggcct acaggagccc gaggggctgc tctaggtggg 1560
tggaaacggg tggttgccat gttttctaat gctggggagc tgcacccacc tcccttccag 1620
ggatttgaat agtggttttt ctctagcttt ttgccagaac aaaggagggt acattactta 1680
aacccagggc atcaggatgt gcttgggcta tggtggccat aaaccctgag cccagagagc 1740
ttgggtcact gtcacctgag tgcagctggg ctgcctcagg cagcttggag tgccagccat 1800
tcctgcaagc accgtttcag ctcttggggc caaccccagg acctttggct ctgtccatca 1860
ccagcaacca atccaccaac agaatgtggt ttctgccatc ctgggcagaa gctgaaggcc 1920
agcttcacat ttctgctgag agaaggtgac ttaacgcctt ttccggccct agctccaggc 1980
gttttgaggc gtctggtgcc tgatggtagg tatggtgtgt ttgttctgtc ccccaggggc 2040
tggagtcacc tggtgccccc gaaggacaga tttttggctg ttaaaggatg gcattttcct 2100
gctgtcttct gtgcgtttag ttttcttgct gagcgggagc tcagtatgac ttgccaccca 2160
cctgatacct cagggcaagg ccctttttcc ctccagccag gtgagtgttt tcttcaggca 2220
gctgagggtc ctgggggagc tgaggctctg tgctgcaccc ccagcccaca gctggggcat 2280
ctcactggag ctgttccagg ccccactgga gagcagagga cctgatcccc cactagagag 2340
gtccggtgtg cacagccggc ctcccagtgt gccaaaatga actgctctca gctgatggct 2400
gtattctgac tttgaagcct gttaagaggt agcaaggggg ctagaggagg gagattccac 2460
ctcccctccc aagtgaccct cctcctgcct ctggtatcct tccttttgaa acgaagctca 2520
gcttcgaaga tgtgaacaag aataaaagga aaaaattcta atgtatatat 2570

<210> 168
<211> 1755
<212> DNA
<213> Rattus norvegicus

<400> 168
acggagatct cgccggcttt acgttcacct cggtgtctgc agcaccctcc gcttcctctc 60
ctaggcgacg agacccagtg gctagaagtt caccatgtct attctcaaga tccatgccag 120
ggagatcttt gactctcgcg ggaatcccac tgttgaggtt gatctcttca cctcaaaagg 180
tctcttcaga gctgctgtgc ccagtggtgc ttcaactggt atctatgagg ccctagagct 240
ccgggacaat gataagactc gctatatggg gaagggtgtc tcaaaggctg ttgagcacat 300
caataaaact attgcgcctg ccctggttag caagaaactg aacgtcacag aacaagagaa 360
gattgacaaa ctgatgatcg agatggatgg aacagaaaat aaatctaagt ttggtgcgaa 420
cgccattctg ggggtgtccc ttgccgtctg caaagctggt gccgttgaga agggggtccc 480
cctgtaccgc cacatcgctg acttggctgg caactctgaa gtcatcctgc cagtcccggc 540
gttcaatgtc atcaatggcg gttctcatgc tggcaacaag ctggccatgc aggagttcat 600
gatcctccca gtcggtgcag caaacttcag ggaagccatg cgcattggag cagaggttta 660
ccacaacctg aagaatgtca tcaaggagaa atatgggaaa gatgccacca atgtgggga 720
tgaaggcggg tttgctccca acatcctgga gaataaagaa ggcctggagc tgctgaagac 780
tgctattggg aaagctggct acactgataa ggtggtcatc ggcatggacg tagcggcctc 840
cgagttcttc aggtctggga agtatgacct ggacttcaag tctcccgatg accccagcag 900
gtacatctcg cctgaccagc tggctgacct gtacaagtcc ttcatcaagg actacccagt 960
ggtgtctatc gaagatccct ttgaccagga tgactgggga gcttggcaga agttcacagc 1020
cagtgcagga atccaggtag tgggggatga tctcacagtg accaacccaa agaggatcgc 1080
caaggccgtg aacgagaagt cctgcaactg cctcctgctc aaagtcaacc agattggctc 1140
cgtgaccgag tctcttcagg cgtgcaagct ggcccaggcc aatggttggg gcgtcatggt 1200
gtctcatcgt tcgggggaga ctgaagatac cttcatcgct gacctggttg tggggctgtg 1260
cactgggcag atcaagactg gtgccccttg ccgatctgag cgcttggcca agtacaacca 1320
gctcctcaga attgaagagg agctgggcag caaggctaag tttgccggca ggaacttcag 1380
aaaccccttg gccaagtaag ctgtgggcag gcaagccttc ggtcacctgt tggctacaca 1440
gacccctccc ctcgtgtcag ctcaggcagc tcgaggcccc cgaccaacac ttgcaggggt 1500
ccctgctagt tagcgcccca ccgccgtgga gttcgtaccg cttccttaga acttctacag 1560
aagccaagct ccctggagcc ctgttggcag ctctagcttt tgcagtcgtg taatgggccc 1620

aagtcattgt ttttctcgcc tcactttcca ccaagtgtct agagtcatgt gagcctcgtg 1680
tcatctccgg ggtggccaca ggctagatcc ccggtggttt tgtgctcaaa ataaaaagcc 1740
tcagtgaccc atgag 1755

<210> 169
<211> 3800
<212> DNA
<213> Rattus norvegicus

<400> 169
gggggacggt gaaggttgcc tcccgcccgt ccgggctctg atcctccgtc tccccgtccc 60
ccggcggccg gcccatggcc tggcggaggc ccgaaccatg gacctccgca ccgccgtgta 120
caacgccgcc cgtgatggca agctgcagct gctccagaag ctgctcagcg gccggagccg 180
ggaggaactg gacgagctga cgggcgaggt ggccggcggg ggaacgccgc tactcatcgc 240
cgcccgctac ggccacctgg acgtggtgga gtacctggtg gaccggtgcg gcgcgagcgt 300
ggaggccggt ggctcggtgc acttcgatgg cgagaccatc gagggcgcgc cgccgctgtg 360
ggccgcctcc gcagccggcc acctggacgt ggtgcggagc ctgctgcgcc gcggggcctc 420
ggtgaaccgc accacgcgca ccaactccac gcctctccgc gccgcctgct tcgacggcca 480
cctggaggtg gtgcgctacc tggtcggcga gcaccaggcc gacctggagg tggccaaccg 540
gcacggccac acgtgcctca tgatctcgtg ctacaagggc caccgtgaga tcgcccgcta 600
cctgctggag cagggcgccc aggtgaaccg gcgcagcgcc aagggcaaca cggccctgca 660
tgactgcgcc gagtccggca gcctggagat cctgcagctg ctgctggggt gcaaggcccg 720
catggaacgt gacggctacg gcatgacccc gctgctcgcg gccagcgtga cgggccacac 780
caacatcgtg gagtacctca tccaggagca gcccggccag gagcaggtcg caggggaga 840
ggctcagcct gggctgcccc aagaagaccc ctccaccagc caggggtgtg cgcagcctca 900
gggggctccg tgctgcagct cctccccaga ggaaccactg aacggggaat cttacgaaag 960
ctgctgtccc accagccggg aagctgccgt ggaagccttg gaattgctgg gagctacgta 1020
tgtggataag aaacgagatc tgcttggggc ccttaaacac tggaggcggg ccatggagct 1080
gcgtcaccag gggggcgagt acctgcccaa accggagccc ccacagctgg tcctggccta 1140
tgactattcc agggaggtca acaccaccga ggagctggag gcgctgatca ccgacccgga 1200
tgagatgcgc atgcaggccc tgttgatccg ggagcgcatc ctcggtccct cgcacccgga 1260
cacttcctat tacatccgtt acaggggtgc cgtgtacgcc gactcgggca atttcgagcg 1320
ctgcatccgc ttgtggaagt acgccctgga catgcaacag agcaacctgg agcctctgag 1380
ccccatgacc gccagcagct tcctctcctt cgcggaactc ttctcctacg tgcttcagga 1440
ccgggccgcc aaaggcagcc tgggcaccca gatcggcttt gcagacctca tgggggttct 1500
caccaaaggg gtccgggaag tggaacgggc cctgcagctg cccagggagc ccggagactc 1560
agcccagttc accaaggcgc tggccatcat cctccacctg ctctacctgc tggagaaagt 1620
ggagtgcacc cccagccagg agcacctgaa gcaccagacc gtctaccgcc tgctcaagtg 1680
cgcgcccagg ggcaagaacg gcttcacccc tctgcacatg gctgtggaca aggacaccac 1740
aaacgtgggc cgctatcccg tgggcagatt cccctccctg cacgtggtca aagtgctgct 1800
cgactgcggg gccgacccgg acagcaggga ttttgacaac aacaccccgc tacacatagc 1860
agcccagaac aactgcccgg ccatcatgaa tgccctgatc gaagcagggg cccacatgga 1920
cgccaccaat gccttcaaga agacggccta cgagctgctg gacgagaagc tgctggccag 1980
gggtaccatg cagcccttca actacgtgac cctgcagtgc cttgcggccc gggccctgga 2040
taagaacaag atcccttaca agggcttcat cccggaagat ctggaggcgt tcatcgaact 2100
gcactgacct gcccagaacg cctgcaccct cacctctccc ctctcctgct gagatggggg 2160
aaatccggct gcggcatagc agatgctcgt tcttgcctcc ttcaggcacc aatcaggaga 2220
agggttctgc ctcccatccc ctctacctgc agacagggtc ggaggtgtta gcgagccttt 2280
ggtgctagaa gcctgcgggg tcatgtgcta agaggacagt ctttctccgg gagcccgctc 2340
actcattctg agttaggaaa agacacaaga ccttccccac atcctgtctg cctgggttag 2400
ggaggccttt gccttgttac ctagaggcgg agggactgaa gccattgcgt tccttccctg 2460
ctagaaacac aggaagaagt tgaggactgt ctgccttccc tcgtcccttt acctggccag 2520
ataactccag ccgctgaata cagtgttagg actgggggct cctgagatga gagtttgaga 2580
ttcagggaat gagaccacct ctcatttctt ccagcatgat cgcgccctgc tcccgtgcca 2640
ccgtagtccc tggcagacag gcagggctct gcccagggca gcctgccact tgcatagctt 2700
tcggttggtt tggtgttctg tttatttaat aagtgggcag gttgcaagcg ttgcacagaa 2760
attctgagat tttactgcct ttttttttt ttttaagaaa gttgtttgtt ggactccata 2820
agtgaatttc aagcagtgag gattttgtgg tgcctgagat ggccgagggc acagggagtg 2880
agctgtatgt gtgaggaatt tggtgagcga gataaaagtc cacggtgtca acccctaaaa 2940
catgggtgac cgtacatttt tatacatctc cactctacgg ccttttacag gctttccgat 3000
tttacaggcc tttccaagtt tccattctcc ttagagagag aactgtgctt ccaaacagaa 3060
atcaggagtg accacaaagc ctgaaaacac tttgccaccc agcaaagaac tggcacaatt 3120
ggtttgggtc tgcattgcca tagtgcccga gttaaaactg caggccactc tgccttgcag 3180

tggcctctga tttcattgtg ggtgcatcca caggtggccc gagctgttct ttcagctgct 3240
ccaaggattg agacccaagt catcatgaaa aaggcccaag tacagtctta atgcgataaa 3300
tccactagct aagacgtcga gtgccaagac cagccttcca gccgaggttt ggacaaagtc 3360
tcaggttccc gtgactcagg gtaaggtgct ggggctgcca gaggacctgc cccagcaaga 3420
tttttgtcaa gagcgagact ccatcagccc aggcagacgg gagcaggttc ttggccagcg 3480
tagacagcag caaacagcag cagggaagcc attctcactg catcctccct gcagtagcca 3540
cggccaggcc cttaggagga gcagtgaccg ggggtgtcca gaaatatcct gtccctggat 3600
ggaaactagg tctcgtttgg attttttttt ttttttgccg tgttaggaaa ttatttatta 3660
atttacaaga caggttttaa ctcagccgag gtgggaaatg gtgtccctgt ccctcccaaa 3720
gcacagagca cagaaatgag gccgtttaca tggcgagtct ccgtgctggt gtttaagtca 3780
ttaaaaagat actcaaagag 3800

<210> 170
<211> 1219
<212> DNA
<213> Rattus norvegicus

<400> 170
acaggatctg cttagtgaaa gaagtggcaa gcaatggatc ccaaatatca gcgtgtagag 60
ctaaatgatg gtcacttcat gcccgtattg ggatttggca cctatgcacc tccagaggtt 120
ccgaggaaca gagctgtaga ggtcaccaaa ttagcaatag aagctggctt ccgccatatt 180
gattctgctt atttatacaa taatgaggag caggttggac tggccatccg aagcaagatt 240
gcagatggca gtgtgaagag agaagacata ttctacactt caaagctttg gtgcactttc 300
tttcaaccac agatggtcca accagccttg gaaagctcac tgaaaaaact tcaactggac 360
tatgttgacc tctatcttct tcatttccca atggctctca agccaggtga gacgccacta 420
ccaaaagatg aaaatggaaa agtaatattc gacacagtgg atctctctgc cacatgggag 480
gtcatggaga agtgtaagga tgcaggattg gccaagtcca tcggggtgtc aaacttcaac 540
tacaggcagc tggagatgat cctcaacaag ccaggactca agtacaagcc tgtctgcaac 600
caggtagaat gtcatcctta cctcaaccag agcaaactgc tggatttctg caagtcaaaa 660
gacattgttc tggttgccca cagtgctctg ggaacccaac gacataaact atgggtggac 720
ccaaactccc cagttctttt ggaggaccca gttctttgtg ccttagcaaa gaaacacaaa 780
cgaaccccag ccctgattgc cctgcgctac cagctgcagc gtggggttgt ggtcctggcc 840
aagagctaca atgagcagcg gatcagagag aacatccagg tttttgaatt ccagttgaca 900
tcagaggata tgaaagttct agatggtcta aacagaaatt atcgatatgt tgtcatggat 960
tttcttatgg accatcctga ttatccattt tcagatgaat attagcatag agggtgttgc 1020
acgacatcta gcagaaggcc ctgtgtgtgg atggtgatgc agaggatgtc tctatgctgg 1080
tgactggaca cacggcctct ggttaaatcc ctcccctcct gcttggcaac ttcagctagc 1140
tagatatatc catggtccag aaagcaaaca taataaattt ttatcttgaa ctaaaaaaaa 1200
aaaaaaaaaa aaaaaaaaa 1219

<210> 171
<211> 3564
<212> DNA
<213> Rattus norvegicus

<400> 171
ggagcgcagt cgctccgcga tggactcgcc ggtcccggcc tctatgttcg cccccgagcc 60
cagctccccg ggggcggcca gggccgcggc ggccgccgcc cgactccacg gcggctttga 120
ctcggactgc agcgaggacg gcgaggcgct caacggcgag ccagagctgg acctcaccag 180
caagctggtt ctagtgagcc ctacatcaga gcagtatgac agcctacttc ggcagatgtg 240
ggagaggatg gacgagggat gcggagagac catatatgtc attgggcagg gatcagatgg 300
gactgagtat gggctgagtg aagctgacat ggaggcctcc tacgccacag tgaagagcat 360
ggcggaacag atagaggccg atgtcatcct tctgcgggaa cggcaagaag ctgggggccg 420
cgtgcgtgat tacctggtcc ggaaacgagt aggagacaat gacttcctgg aggtcagggt 480
agcagtggtg ggcaacgtgg atgctggcaa aagcacgctt ctgggggtcc tgacacatgg 540
ggagctggac aatggccgag gctttgcccg ccagaaactc ttccgccaca aacatgaaat 600
tgaatctggt cgcaccagca gtgtgggcaa cgacattctg ggctttgaca gtgaaggcaa 660
tgtagtgaac aagcctgaca gccacggcgg cagcctggag tggaccaaga tctgtgagaa 720
gtccacgaaa gtcattacct tcatcgactt ggctggtcat gagaagtacc tgaaaaccac 780
tgtcttcggc atgacaggcc atctgcctga cttctgcatg ctcatggtgg gcagcaatgc 840
tggcatcgtg gggatgacca aagaacacct gggcttggca ctggcactca atgtacctgt 900
ctttgtggta gtcaccaaga ttgacatgtg tcctgccaac atcctgcaag aaaccctgaa 960
gctgttacag cgcctgctga agtcaccagg ctgccggaag atccccgtgc tggtgcagag 1020

caaagatgat gtgattgtca cagcctccaa cttcagctct gaaaggatgt gcccgatatt 1080
ccagatctcc aacgttacag gcgagaacct agatctgctg aagatgttcc tcaacctcct 1140
ctccccccgc accagctaca gggaggagga gcctgctgag tttcagattg atgacaccta 1200
ctccgtcccg ggtgtgggga cagtggtttc ggggacaaca ctgagaggcc tgatcaagct 1260
gaatgacacg ctgctgctgg gcccagaccc cttgggtaac ttcctgtcca ttgctgtcaa 1320
atccatccat cgcaagcgca tgcctgtcaa ggaggtgcgg ggtggccaga cagcatcctt 1380
tgcgctgaag aagatcaagc gctcgtccat ccggaagggc atggtgatgg tttccccacg 1440
tttgaatccc caagcctcct gggagtttga ggccgagatt ctcgtcctcc accaccccac 1500
cacaattagc ccgcgctacc aggccatggt gcactgtggg agcatcaggc agacagccac 1560
cattctgagc atggacaagg actgtctgcg cactggggac aaggccactg tacacttccg 1620
cttcatcaag acccctgagt acctgcacat agaccagcgg ctggtgttcc gggaaggccg 1680
caccaaggct gtcggcacca tcaccaagct cctccagacc accaacaact ccccaatgaa 1740
ctccaagccg cagcagatta aaatgcagtc gacgaaaaag ggccccctga cgaaacgaga 1800
cgaggggggc ccgtctggtg ggccagcagt aggagcaccc ccacctggag atgaagcctc 1860
ctctgtaggg gcagggcaac cagctgcgtc cagcaatctc cagcctcagc ctaagcccag 1920
cagtggaggc cggcgacgag ggggccagcg ccacaaggtg aagtcccagg gggcctgtgt 1980
gactcctgcc agcggctgct gaaccttccc ctggcccacc ctcaccaccc aaggggtcat 2040
catctctggc caccactcca ccagatgggc agagcagcta tgaccgccac ccagccctcc 2100
cgctcaggcc acagccggag cctccgcatt gcccccaccc ccattttcca ggggggttgt 2160
aatttataag ctgacgaagg tagccagact tccggaggac tgaccatctc tcactgtcct 2220
ccccaccttc ttcctcactc acacattttt tgtacatctg ggcccttagt ttttattctg 2280
tttattatat gtctctgtct ctctctattg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 2340
tgtgtgtgtg gtgcaggagt gccacccccа gggccctgtc aacctctctt ttctcctcca 2400
tggctgtctg cctgcgtatc tgtctctgag aatcctcggg gcggtcaggg gatgtcagga 2460
ggggaaggag ccgccctccc tatcttgctg ctcctcttgg cactcagggg caccttccat 2520
ggagccagac cgggtggagg ggcttctggg atttggtgtc tgctgctgcc agagcaggaa 2580
cccccagtct aggacttggg cattttaaca gggagaaagt agtggcttcc cttttctctc 2640
tctcctcctt tttcccttta agcccacaga ttcaggtcat gccaaaagct ctctggttgt 2700
aacctggaga catgtggagg ggaatggcga tgggattata ggactctccc catctcgggc 2760
cctgaccctg acccttgcca ccaacccaaa gacagctggt gggtttcccc ttggagacaa 2820
tcctgcgttt gcctgggccg gccctggctg ccctcagctt tcgctgatct gcccggcctg 2880
gagcctccca tcaccccgct tcttgttggg cctcaggcac tggttaccag aaggggggtct 2940
gggtctgctc aggatcatgt tttgtagcac ctcctgttgg aggggtggag ggatgttccc 3000
ctgagccagg ctgagactag aaccccatct tccctgagcc aggctgagac tagaacccca 3060
tcttccccac cacgccaccc ctgtggctgc tacaggagca cagtagtgaa ggcctgagct 3120
ccaggtttga aagacccaac tggagcgtgg ggcgggcagg caggggttag tgaaaggaca 3180
cttccagggt taggacagag catttagcct tctggaagaa cccctgcctg gggtgggact 3240
gtgcaggcca gagaaggtgg catgggcctg aacccacctg gactgacttc tgcactgaag 3300
ccacagatgg agggtaggct ggtgggtggg ggtggttcgt tctctagccg gggcagacac 3360
ccagctggct gggtccttcc tcagccttgc ctcctcctgt ccccaaccct ttcctttcct 3420
cctgcttgcg gactgctggt cccctctcct tccctccttc cagctgtttc tagttaccac 3480
ctacccctgg ccgtggactg atcagaccag cattcaaaat aaaagtttgt tccaaaaaaa 3540
aaaaaaaaaa aaaaaaaaaa aaaa 3564